

# nabc language for gregorio

AL  
II

**A**

L- le- lú-ia.      ꝥ. Ve- ni Sancte

Spí- ri- tus, replé tu- ó- rum corda fi-dé- li- um: et tu- i a-mór-

is in e- is ignem ac- cénde.

CO  
II

**O**

M- nes \* qui in Chris- to bap- ti- zá- ti es- tis, Chris- tum in-du-

í- stis, al- le- lú- ia.

The nabc language provides the ability to describe some adiaستمatic neumes, for now just the St. Gallen and Laon (Metz notation family) style. The language is partially based on Dom Eugène Cardine's Table of neumatic signs, but for more complex neumes doesn't always match how the neumes are called; instead attempts to make it easier to compose complex neumes from basic glyphs. To describe adiaستمatic neumes in gabc, the header should contain nabc-lines: 1; line, like:

```
nabc-lines: 1;
(f3) AL(ef~|ta>)le(fg/hggf|peclhgpilú(ef~|ta>)ia.(f.|ta-) (,)
(ii//|bv-|gh!ivHG//|vi-hhpu2su1sut1|fhg/|to|eef.|pt) (;)
```

The nabc snippets are then separated by | character from gabc snippets or other nabc snippets. Every gabc snippet may be followed by multiple nabc snippets. The maximum number of consecutive nabc snippets is the number declared in the header field nabc-lines: x;. After reaching that number of consecutive nabc snippets another gabc snippet followed by nabc snippets can follow. A single nabc snippet is not split into multiple lines, so for larger melismatic pieces it is desirable to synchronize the gabc snippets with corresponding nabc snippets. With nabc-lines: 1; the gabc and nabc snippets form an alternating pattern, like (gabc|nabc|gabc|nabc|gabc), in this case the last gabc snippet does not have any corresponding nabc neumes. With nabc-lines: 2; the snippets ordering could be e.g. (gabc|nabc1|nabc2|gabc|nabc1).

Each nabc snippet consists of a sequence of *complex neume descriptors*. Each *complex neume descriptor* consists of optional *horizontal spacing adjustment descriptor*, then *complex glyph descriptor*, optionally followed by a sequence of *subpunctis and prepunctis descriptors*, optionally followed by a sequence of *significant letter descriptors*.

The *horizontal spacing adjustment descriptor* consists of a sequence of horizontal spacing adjustment characters / and `.

- // move by nabclargerspace skip to the right
- / move by nabcinterelements space skip to the right
- `` move by nabclargerspace skip to the left
- ` move by nabcinterelements space skip to the left

The *complex glyph descriptor* consists of a *glyph descriptor*, optionally followed by a sequence of other *glyph descriptors*, all separated by the ! character. This is used to describe more complex glyphs, where certain basic glyphs are connected together.

Each *glyph descriptor* consists of a *basic glyph descriptor*, followed by optional *glyph modifiers*, followed by optional *pitch descriptor*.

The following description is for the St. Gall family of neumes, when using the gregall or gresgmodern fonts. For details on Laon (Metz notation family) neumes see 4.

The *basic glyph descriptor* is a two-letter string from the following table:

vi ✓ virga	po ✓ porrectus	tr ✓ torculus resupinus	tv /// trivirga	pq ✓ pes quassus
pu . punctum	to . torculus	st , stropa	pr ✓ pressus maior	q1 ✓ quilisma (3 loops)
ta . tractulus	ci ✓ climacus	ds .. distropa	pi ~ pressus minor	qi ✓ quilisma (2 loops)
gr , gravis	sc ✓ scandicus	ts ... tristropha	vs ✓ virga strata	pt ✓ pes stratus
cl ✓ clivis	pf ✓ porrectus flexus	tg . trigonus	or s oriscus	
pe ✓ pes	sf . ✓ scandicus flexus	bv ✓ bivirga	sa ✓ scandicus	

The *glyph modifiers* is a possibly empty sequence of following characters optionally followed by a number:






- S modification of the mark
- G modification of the grouping (neumatic break)
- M melodic modification
- - addition of episema
- > augmentive liquescence
- ~ diminutive liquescence





If Dom Cardine's table contains multiple glyphs with the same modifiers, a positive number is added afterwards. E.g. for augmentive liquescent clivis the table shows two different glyphs, the ancus cl> ✓ and then another neume - cl>1 ✓, the first neume does not contain any number after it, while the 1 indicates first variant.

The *pitch descriptor* allows to specify the vertical position of the neume. There are no staves, so the vertical position is only rough. For pitches the same letters as in gabc are used, a through n and p. If the *pitch descriptor* is missing, the default is hf, otherwise it consists of the letter h followed by the pitch letter. Within the *complex glyph descriptor*, each *basic glyph descriptor* has its own pitch, but in the current fonts there are no glyphs with different relative pitches, so if you use a *pitch descriptor* on any of the *basic glyph descriptors* in the *complex glyph descriptor*, it is best to use the same one on all the other *basic glyph descriptors* in the same *complex glyph descriptor*.









The *subpunctis and prepunctis descriptor* consists of the letters su for subpunctis or pp for prepunctis, followed optionally by a modifier letter from the following table and finally a mandatory positive number of repetitions. If the modifier letter is missing, it is a punctum.

- t . tractulus
















































- u  tractulus with episema
- v  tractulus with double episema
- w  gravis
- x  liquescens strophæ
- y  gravis with episema

Only subpunctis are normally used in neume classification, the prepunctis is a nabc concept to describe the rising sequence of punctis, tractulis etc. in the left low corner of some neume. While e.g. vipp2  describes the same neume as sc , the former form allows better control on how many punctis or tractulis or tractulis with episema etc. there are. Some examples: ppt3  stands for 3 raising tractulis with episema, while su1sut1sux1  stands for a punctum, followed by tractulus, followed by liquescens strophæ.

The *significant letter descriptor* consists of the letters ls, followed by a shorthand of the significant letter or common group of them, followed by a number - a rough position relative to the *complex glyph descriptor* glyph with prepunctis and subpunctis attached to it. If more than one *significant letter descriptor* is used on the same *complex neume descriptors* for the same position, then they are ordered in the order they are written in the nabc snippet at that position. The position numbers are:

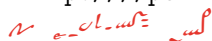
1  left upper corner	2  above the neume	3  right upper corner
4  to the left of the neume		6  to the right of the neume
7  left bottom corner	8  below the neume	9  right bottom corner

The shorthands, including the ls prefix, which should be followed by the above mentioned position digit:


lsal  altius	lsiv  iusum valde	lss  sursum
lsam  altius mediocriter	lsk  klenche	lssb  sursum bene
lsb  bene	lsl  levare	lssc  sursum celeriter
lsc  celeriter	lslb  levare bene	lssimil  similiter
lscm  celeriter mediocriter	lslc  levare celeriter	lssimul  simul
lscw  coniunguntur	lslen  leniter	lssm  sursum mediocriter
lscw  celeriter (wide form)	lslm  levare mediocriter	lsst  sursum tenere
lsd  deprimatur	lslp  levare parvum	lssta  statim
lse  equaliter	lslt  levare tenere	lst  tenere
lseq  equaliter	lsm  mediocriter	lstb  tenere bene
lsew  equaliter (wide form)	lsmoll  molliter	lstm  tenere mediocriter
lsfid  fideliter	lsp  parvum	lstw  tenere (wide form)
lsfr  frendor	lspar  paratim	lsv  valde
lsg  gutture	lspfec  perfecte	lsvol  volubiliter
lsi  iusum	lspm  parvum mediocriter	lsx  expectare
lsim  iusum mediocriter	lspulcre  pulcre	

Finally a commented example of a nabc snippet:


```
``po:///pe>2lse7ls13qlhh!vshhppt1sut2q1>ppu3
```





`` stands for a negative horizontal skip (move to the left) by nabcinterelements space and nabclargerspace.

po  is a basic porrectus, at the default pitch (height hf).


























:/// stands for a horizontal skip (move to the right) by two times nabclargerspace.

pe>2lse7ls13  stands for the 3rd augmentive liquescent form of podatus (epiphonus with tractulus, see the following page) at the default pitch, with equaliter in the low left corner and levare in the upper right corner.





qlhh!vshhppt1sut2  stands for a 3 loop quilisma joined with virga strata, both at relative pitch 2 above the default one, with a single tractulus before it and two subpunctis - tractulis.

q1>ppu3  is a 3 loop liquescent quilisma with 3 tractulis with episema before it.

The *basic glyph descriptor* for Laon neumes is very similar to the one used for St. Gall neumes, but with uncinus and oriscus-clivis added and strophæ, 2 loops quilisma and gravis removed:























un 	pe 	tr 	pi 
vi 	po 	ds 	vs 
pu . punctum	to 	ts 	or 
ta 	ci . climacus	tg 	sa 
gr gravis	sc 	bv 	pq 
cl 	pf 	tv 	ql 
oc 	sf 	pr 	pt 

The *subpunctis and prepunctis descriptor* consists of the letters su for subpunctis or pp for prepunctis, followed optionally by a modifier letter from the following table and finally a mandatory positive number of repetitions. If the modifier letter is missing, it is a punctum.
















- n 
- q 
- z 
- x 

The *significant letter descriptor* for Laon neumes allows another position, 5, which stands for inside the neume. The exact position of the letter depends on the glyph, if there is no glyph with the neume inside of it, it can't be positioned inside the neume.

The shorthands, including the 1s prefix, which should be followed by the above mentioned position digit for Laon neumes are:

lsa 	lsnl 
lsc 	lsnt 
lseq 	lsm 
lseq- 	lsmd 
lsequ 	lss 
lsf 	lssimp 
lsh 	lssimpl 
lshn 	lssp 
lshp 	lsst 
lsl 	lst 
lsn 	lsth 

For the Tironian notes the form of the *significant letter descriptor* starts with the 1t prefix followed by letters from the following list, followed by above mentioned position digit (5 can't be used):

lti 	ltsj 
ltdo 	ltsl 
ltdr 	ltsn 
ltdx 	ltsp 
ltps 	ltsr 
ltqm 	ltst 
ltsb 	ltus 
ltse 	
































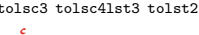







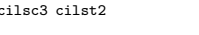

















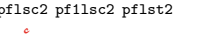







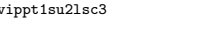

















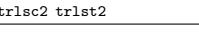




























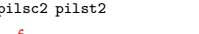
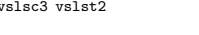






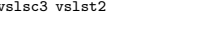






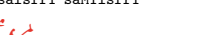













Names of Symbols	Simple Symbols	Symbols differentiated by				Symbols indicating a special meaning		
		the addition		the modification		melodic	phonetic	
		of letters	of episemas	of the mark	of the grouping (neumatic break)		liquescence	
							augment.	diminut.
virga		 vilsc3 vilst1 vippt1lsc2	 vi-				 vi>	
tractulus		 talsc3 talst2					 ta>	
punctum							 st visulsux1	
gravis								
clivis		 cllsc3 cl1st2 cl-1st2	 cl- clS-	 clS clS1		 clM	 cl> cl>1	 cl-
pes			 pe- pe-1	 peS	 peG	 peG	 pe> pe>1 pe>2	 pe-
porrectus		 polsc2	 po- po-1		 poG		 po>	 po-
torculus		 tolsc3 tolsc4lst3 tolst2	 to- to-1	 toS toS1 toS2 toS3	 toG	 toM toM1	 to>	 pe>
climacus		 cilsc3 cilst2	 ci-	 ciS ciS1 visut1su2	 ciG ciG1	 ciM	 ci>	 ci-
scandicus			 sc-	 scS	 scG scG1	 scM1	 sc>	 sc-
			 vi-hevi-hivi-hm			 vihevihivihm		
porrectus flexus		 pflsc2 pfl1sc2 pflst2	 pf-	 pfS	 sfM	 pfM	 pf>	 pf-
pes subbipunctis		 vippt1su2lsc3	 pe-su2 pe-1su2  pe-1sut2	 peSsu2 peSsut2	 vippt1su2  toS2sut1	 vi-!ci pesu1suw1	 pesu1sux1	 to>
scandicus flexus		 sflsc3	 sf-	 sfS	 vi-tohk peclhi	 sfM	 cl>ppt2	 sc>
torculus resupinus		 trlsc2 trlst2	 tr-1	 trS	 trG trG1 trG2	 trM	 tr>	 tr-
apostropha			 st-	 stS			 st>	
distropha		 ds-lsx6	 ds-				 ds>	
tristropha		 ts-lsx6	 ts-			 tsM	 ts>	
trigonus		 tg tg1		 tgS tgS1 tgS3		 tgM		 ds>
bigirga & trivirga			 bv- tv-				 bv>	
pressus		 prlsc2 pr-lsc2 prlst2  pilsc2 pilst2	 pr-			 prM	 pr> pi>	 vs>  or>
virga strata		 vslsc3 vslst2	 vs-				 vs>	 ta>
oriscus							 or>	
salicus		 salsfr1 saM1lsfr1	 sa- sa-1		 saG	 saM saM1 saM2	 sa> sa->1	 pe>2
pes quassus		 pqlsfr1	 pq-				 pq>	
quilisma			 ql- qi-				 ql> qi>	
pes stratus								

Table from Cardine's Gregorian Semiology, pp. 12-13 with nabc strings and gregall glyphs.

















































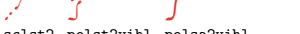





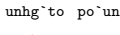
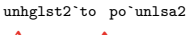


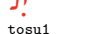
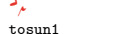












Name of Symbols	Simple Symbols	Symbols differentiated by			Symbols indicating a special meaning		
		the modification		the addition of letters	melodic	phonetic	
		of the mark	of the grouping (neumatic break)			Liquescence	
						augment.	diminut.
uncinus							
punctum							
virga							
tractulus							
clivis							
pes							
porrectus							
torculus							
climacus							
scandicus							
porrectus flexus							
(pes subbipunctis)							
scandicus flexus							
torculus resupinus							
clivis + pes or torculus							
oriscus							
quilisma							
pes stratus							

Table from Cardine's Gregorian Semiology, pp. 14-15 with nabc strings and grelaon glyphs.

Table with nabc strings and corresponding gregall and gresgmodern glyphs:

bv			clpp2			pe-1		
bv-			clppt1			pe-1su1sut1		
bv>			clppt2			pe-1su1sut2		
ci			cl~			pe-1su1suu1		
ci-			ds			pe-1su1suu2		
ci-pp2			ds-			pe-1su1suw1		
ci1			ds>			pe-1su2		
ci>			ds1sx6		missing	pe-1sut1suw1		missing
ciG			gr			pe-1sut1sux1		
ciG1			gr-			pe-1sut2		
ciM			gr-lsc6		missing	pe-1sut3		
ciM-	missing		lsal			pe-1suw2		
ciS			lsam			pe->		
ciS1			lsb			pe->1		
ciSppt1			lsc			pe-su1sut1		
cilsc3		missing	lscm			pe-su2		
cippt1			lsco			pe-su2suy1		
cippt1lsc3		missing	lscw		missing	pe-su3sut1		
cippu1			lsd		missing	pe-su4		
cippu1lsc3		missing	lse			pe>		
ci~			lseq		missing	pe>1		
cl			lsew		missing	pe>2		
cl!cl>1			lsfid		missing	pe>ppt1	missing	
cl!clS			lsfr			peG		
cl!clSsut2			lsg			peS		
cl!pi			lsi			peSsu1sux1		
cl!pilsc1lst3		missing	lsim			peSsu2		
cl!pilsc2		missing	lsiv		missing	peSsut1su2		
cl!po			lsk			peSsut2		
cl!po-1			lsl			peSsut3		
cl!po>			lslb			peppt1		
cl!po>ppt1			lslc			pesu1sut1		
cl!pr			lslen		missing	pesu1sut3		
cl-			lslm			pesu1suu1		
cl-!pi			lslp			pesu1suw1		
cl-1su2			lslt			pesu1sux1		
cl->			lsm			pesu2		
cl->1			lsmoll			pesu2suv1		
cl-lst2		missing	lsp			pesu3		
cl-ppt1	missing		lspar		missing	pesut2		
cl-ppt2			lspfec		missing	pesuv1su1sut1		
cl>			lspm			pe~		
cl>1			lspulcre		missing	pf		
cl>pp2	missing		lss			pf!cl-		
cl>ppt2			lssb			pf!clM-		
clM			lssc			pf!clM-ppt1		
clM-			lssimil			pf!cl~		
clMpp2	missing		lssimul		missing	pf!cl-ppt1		
clS			lssm			pf!pr		
clS-			lssst			pf-		
clS-1			lssta		missing	pf1lsc2		missing
clS-su2			lst			pf>		
clS1			lstb			pfG		
clSsu1sut1			lstm			pfM		
clSsu2			lstw		missing	pfM-	missing	
clSsut1			lsv		missing	pfMsut1		
clSsut1sux1	missing		lsvol		missing	pfMsut1		
clSsut2			lsx			pfMsuu1	missing	
clSsux1	missing		lor			pfS		
cllsc3		missing	or>			pf1sc2		missing
cllst2		missing	pe			pf1st2		missing
			pe!vi			pf~		
			pe-			pi		

pi>			qi!clppt1		ql-ppt1suu2	
piM	missing		qi!po		ql-ppt2su1suv1su2	
pilsc2		missing	qi!po>	missing	ql-su1sut1	
pilst2		missing	qi!vs		ql-su1sut2	
pisu1			qi!vsppt1		ql-su1suu1	
pisut1			qi!vsppt1su2		ql-su1suu2	
po			qi!vssu2		ql-su1suv1su2	
po-			qi-		ql-su1sux1	
po-1			qi-ppt1su1sut2		ql-su2	
po-1pp2su1sux1			qi-su1sut2		ql-su3	
po-1su1sux1			qi-su1sux1		ql-sut1sux1	
po-1su2			qi-su2		ql-sut2	
po-2	missing		qi-sut2		ql-sut2suu1	
po>			qi-sut3		ql-suu2	
poG			qi>		ql>	
poG-			qi>ppt1		ql>ppt1	
poG-1	missing		qippt1		qlppt1	
poG1	missing		qippt2sut2		qlppt1sut3	
polsc2		missing	qisut1sux1		qlsut2	
posu2			qisut2		qlsut3	
po~			ql		sa	
pp1			ql!cl		sa!cl	
pp2			ql!cl!cl>		sa!cl-	
pp3			ql!cl!cl>ppt1		sa!cl>	
pp4			ql!cl!pi		sa!clS-1	
pp5	missing		ql!cl!pippt1		sa!clS1	
ppt1			ql!cl-		sa!clS1sc2	missing
ppt2			ql!cl->		sa-	
ppt3			ql!cl->ppt1		sa-1	
ppt4			ql!cl-ppt1		sa->1	
ppt5			ql!cl>		sa-lsfr1	missing
ppu1			ql!clM		sa-su2sut1	
ppu2			ql!clMppt1		sa1	
ppu3			ql!clS	missing	sa1!cl->	
ppu4			ql!clS-2		sa1!cl>	
ppu5			ql!clS-2ppt1		sa>	
pq			ql!clS-2ppt1sut1		sa>1	missing
pq!cl			ql!clS-2sut1		sa>2	
pq!cl-			ql!clppt1		saG	
pq!cl>			ql!pf		saM	
pq-			ql!pf-		saM-1	
pq-su2			ql!po		saM-4	
pq>			ql!po-1		saM1	
pqS			ql!po-1ppt1		saM2	
pqS-	missing		ql!po>		saM3	
pqS>			ql!poppt1		saM4	
pqlsfr1		missing	ql!po~		salsfr1	missing
pr			ql!po~ppt1		sapp1	
pr-			ql!vs		sa~	
pr-lsc3		missing	ql!vsppt1		sc	
pr>			ql!vsppt1su2		sc-	
prM			ql!vsppt1sut2		sc-1	missing
prlsc2		missing	ql!vssu2		sc1	
prlst2		missing	ql!vssu3		sc>	
pr~			ql!vssut2		scG	
pt			ql-		scG-1	missing
pu			ql-ppt1		scG1	
qi			ql-ppt1su1sut2		scM	missing
qi!cl			ql-ppt1su1suu1		scM1	
qi!cl-			ql-ppt1su1sux1		scM2	
qi!cl>			ql-ppt1su2			
			ql-ppt1su3			
			ql-ppt1sut2suu1			



scS		suw2		tolsc4lst3		missing
sc~		ta		tolst2		missing
sf		ta-		toppt1	missing	
sf-		ta>		toppu1		
sf>	missing	ta>ppt1		tr		
sfG	missing	talsc3	missing	tr-	missing	
sfG1	missing	talst2	missing	tr-1		
sfM		tg		tr-1su2		
sfM1	missing	tg1		tr-2	missing	
sfS		tgM		tr-3		
sflsc3		tgS		tr~		
st		tgS-		tr~1		
st-		tgS1		tr>		
st>		tgS2	missing	trG		
stS		tgS3		trG1		
su1		tgS4		trG2		
su1sut1		tgSsuu1		trM		
su1sut1su1sut1		tgsuu1		trS		
su1sut1su2		to		trS-		
su1sut1sux1		to!ciG		trS1		
su1sut1suy1		to!ciGhh	missing	trSsut2		
su1sut2		to!cl		trlst2		missing
su1sut2su1		to!cl!cl		tr~		
su1sut3		to!cl!cl!cl		ts		
su1suu1		to!cl!pi		ts-		
su1suu1su1		to!cl!po		ts>		
su1suu1su2		to!cl!po-1		tsM		
su1suu2		to!cl-		tsM-		
su1suv1		to!cl-!cl-		tslsx6		missing
su1suv1su2		to!cl-1		tv		
su1suw1		to!clS		tv-		
su1sux1		to!pi		vi		
su2		to!po		vi-		
su2sut1		to!posu2		vi-!ci		
su2suv1		to!pr		vi-!vi!vi		
su2suw1		to-		vi-!vi-!vi		
su2sux1		to-1		vi->		
su2suy1		to-1su1		vi-lst3		missing
su3		to-1su2		vi-pp2		
su3sut1		to-1suu1	missing	vi-pp4		
su4		to-1suu1su2		vi-ppt2		
su5		to->		vi-ppt3		
sut1		to>		vi-su1sut1		
sut1su1sux1	missing	to>1		vi-su1sut1su2		
sut1su2		to>2	missing	vi-su1sut2		
sut1suu1		to>pp2		vi-su1sut2su1		
sut1suw1	missing	toG		vi-su1suu1		
sut1sux1		toM	missing	vi-su1suu1su1		
sut2		toM-		vi-su1suu1su2		
sut2su2		toM1		vi-su1suu2		
sut2suu1		toM2	missing	vi-su1suw1	missing	
sut2sux1	missing	toM2-	missing	vi-su1sux1		
sut2suy1		toM3		vi-su2		
sut3		toS		vi-su2sut1		
sut3suw1		toS1		vi-su2suw1	missing	
sut3suy1		toS2		vi-su2sux1		
sut4		toS2su2		vi-su3		
suu1		toS2sut1		vi-su4		
suu1su2		toS2sut2		vi-sut1su2		
suu2		toS2sut2		vi-sut1suu1		
suu2su2		toS2sux1		vi-sut1sux1	missing	
suu3		toS3		vi-sut2		
suv1		toS3lst2	missing	vi-sut2sux1	missing	
suv1su1sut1		toS4	missing			
suv1su2		toSsu2				
		tolsc3	missing			

vi-sut3			vippu1su2			visut1su2		
vi-sut4			vippu1su2lsc3		missing	visut1sux1		
vi-suu1su2			visu1sut1			visut2		
vi-suu2			visu1sut1su1sut1			visut2su2		
vi-suu2su2			visu1sut1su2			visut2sux1	missing	
vi-suu3			visu1sut1sux1			visut2suy1		
vi>			visu1sut1suy1			visut3		
vi>pp2			visu1sut2			visut3suw1		
vi>ppt2			visu1suu1			visut3suy1		
vi>ppt3			visu1suu1su2			visut4		
vilsc3		missing	visu1suv1			visuu1su2		
vilst1		missing	visu1suw1			visuu2su2		
vipp2			visu1sux1			visuv1su2		
vipp3			visu2			vs		
vipp4			visu2lsc3		missing	vs-		
vippt1su1sut1			visu2sut1	missing		vs->		
vippt1su2			visu2suw1			vs>		
vippt1su2lsc3		missing	visu2sux1			vslsc3		missing
vippt2			visu3			vslst2		missing
vippt3			visu5			vs~		

Table with nabc strings and corresponding grelaon glyphs:

bv		cl!pi>		lst		pelsm2	
bvlsa2		cl!pilsn3lsa6		lsth		pelsn2	
bvsun4		cl!pilsn8		ltdo		pelsn3	
ci		cl!pilsn9		ltdr		pelsst1lsm4	
cilsf1		cl!pilst9		ltdx		pelsst2	
cilsn8		cl!pipp2		lti		pelst2	
cl		cl>		ltps		pesu2	
cl!cl!cl		cl>1		ltqm		pesu2lst3	
cl!cl!cilsn9		cl>1pp2		ltsb		pesu2sun1	
cl!cl!clsun1lsa5		cl>lsa5		ltse		pesun3	
cl!cl!pi		clG		ltsj		pesun3lss1lsa3	
cl!cl!pi!vi		clG1		ltsl		pf	
cl!cl!po		clGlsa5		ltsn		pf1	
cl!cl!to		clGlsnl2		ltsr		pf2	
cl!or		clM		ltst		pf>	
cl!orpp2		clshn8		ltus		pf>1	
cl!pe		clsm2		oc		pf>2	
cl!pelsc2		cllsn8		oc!cl		pfM	
cl!pelsn7		cllsn9		oc!clM		pfM	
cl!pelst2		cllsnt2		oc!pe		pfMlsm3	
cl!pi!vi>		cllsst6		oc!pe!pu		pfS	
cl!po		cllsst8		oc!vi		pfppn1ppq1sun1lsa5	
cl!popp3		cllst9		oc!visun1		pfsun1	
cl!to		clsu2sun1lst6		ocG		pfsun1lsn5	
cl!to!cl!cl		clsu3lst5		ocG1		pf~	
cl!to!pi		clsun1lst5		ocGlsa5		pf~1	
cl!to!pi!cl		ds		oclst8		pi	
cl!to!pi!clpp2		ds1		or		po	
cl!to!pi!clpp2lsn9		ds1!clsu1sun1		or1		po>	
cl!to!pipp2		ds1!clsu1sun1lst5		or>		po>1	
cl!to>		ds1!clsun2		or>lsa1		po>pp2	
cl!tolst9		ds1!clsun2lst5		orlst3		po>ppn1	
cl!topp2		ds1!clsun2lst5		orsu1sun1		poG	
cl!toppz1su1sun1		ds1!ds1		orsu1sun1lsc2		poM	
cl!tosu1		ds1!ts		orsu1sun1lsc3		poMsun1	
cl!tosu1lsc6		ds1!ts1		pe		polsf2lst3	
cl!tosu1lsc6lst8		ds1pp3		pe!or		polst2	
cl!tosun1lsa5		dslst2		pe!pu		popp2	
cl!lor		dslst8		pe!ta		popp2su1sux1	
cl!lorlsc3		lsa		pe!ta>2		poppn1	
cl!lorlsc3		lsc		pe!ta>2lsa2		posu1sun1	
cl!lorlss3		lseq		pe!talsa2		posun1lsa5	
cl!lorlss3		lseq-		pe!talsc1lst2		posux1	
cl!lorpp2		lsequ		pe!un		posux1lsa5	
cl!lorpp2		lsf		pe!unlsc2		pp1	
cl!lorpp2		lsh		pe>		pp2	
cl!lorpp2		lshn		pe>1		pp2ppn1	
cl!lorpp2		lshp		pe>1lsa6		pp3	
cl!lorpp2		lsl		peG		pp4	
cl!lorpp2		lsm		peG1		ppn1	
cl!lorpp2		lsm2		peGlsa6		ppn1pp1	
cl!lorpp2		lsn		peGlsf1		ppn1pp1ppz1	
cl!lorpp2		lsnl		pelsa2		ppn1ppq1	
cl!lorpp2		lsnt		pelsc2		ppn1ppz1	
cl!lorpp2		lss		pelsl2			
cl!lorpp2		lssimp					
cl!lorpp2		lssimpl					
cl!lorpp2		lssp					
cl!lorpp2		lsst					

ppn1ppz1ppq1	ql!polsa1lsa3lsa9	salsc4	to!cl!pi
ppn2	ql!polism1	salsc6	to!cl>1
ppn2ppz1	ql!poppn1	sc	to!clM
ppn2ppz1ppq1	ql!poppn1lst2	sc1	to!clsu1sun1
ppn3	ql!poppn1sun1	sc1lsc4	to!clsu1sun1lsm6
ppn3ppz1	ql!poppn1sux1	sclst2	to!clsu2
ppn4	ql!poppz1	sf	to!clsu2lsn6
ppq1	ql!poppz1lsa3	sfG	to!clsun1
ppz1	ql!poppz1su1sun1	su1	to!clsun1lsa5
ppz1ppq1	ql!posu1sun1	su1sun1	to!or
pq	ql!posun1	su1sun1su1	to!orlsc6
pq1	ql!posux1	su1sun1su2	to!orlst3
pr	ql>	su1sun2	to!orsun1lsa5
pt1	ql>ppn1	su1sux1	to!pi!cl
pt1ppn1	ql>ppn1lsc3	su2	to!pi!cl!pi!orsun1lsa5
pt2	ql!sst2	su2sun1	to!pi!cl!pi!pi
pt3	ql!ppn1	su3	to!po
pu	ql!ppn1ppz1	su4	to!pohd
pu1	ql!ppn1ppz1lst2	sun1	to!to
pulsnt3	ql!ppn1ppz1su1sun1	sun1su1	to!to!pi!cl
pupp1su1sun1	ql!ppn1ppz1sun1	sun1su1sun1	to!to!pi!clpp2
pupp1su2	ql!ppn1ppz1sun1lsa5	sun1su2	to!toppn1sun1
pupp2su1sun1	ql!ppn1su1sun1	sun2	to!tosun1
pupp2su2	ql!ppn1su1sun2	sun2su1	to>
puppn1su1sun2	ql!ppn1su2	sun2su2	to>2
puppz1su1sun2	ql!ppn1su2lsn1	sun3	to>2lsa3
puppz1su2	ql!ppn1sun1	sun4	to>2lsc1lsa3
pusu1sun1	ql!ppn1sun1lsc5	sux1	to>lsa5
pusu1sun1lsf1	ql!ppn1sun1su2	ta	to>pp2
pusu1sun1lst7	ql!ppn1sun1su2	ta>	toG
pusu1sun2	ql!ppn2sun1	ta>1	toGlsa1lst8
pusu1sun2lsa5	ql!ppn2sun1lsa5	ta>2	toGlsa5
pusu2sun1	ql!ppn2sun2	ta>2lsc2	toS
pusu3	ql!ppz1su1sun1	ta>lsn2	toS!pe
pusu4	ql!ppz1su2	ta>pp2	toS!to
ql	qlsu1sun1	tasu2	toS!tolst9
ql!cl	qlsu2	tg	toS1
ql!cl!or	qlsun1	tg!cl	toSlsa5
ql!cl!orppn1ppz1	qlsun1lsa5	tg!cl>1	toSsun1lsa5
ql!cl!to	qlsun1su2	tg!cllsn9	tolsf4
ql!cl!to!or	qlsun2	tg!or	tolsn8
ql!cl!to!orsun1	qlsun2lsa5	tglsn8	tolst2lst9
ql!cl!tolst6	qlsux1	tg!st9	tolst9
ql!cl!toppn1	sa	tglsun1lsa5	tolsth8
ql!cl!tosu3	sa1	to	topp1su1
ql!cl!tosu3lst6	sa1lsc4	to!cl	topp1su1lsa6
ql!cl!tr>	sa1lsc6	to!cl!cl	topp2
ql!cl!tr>ppz1	sa1sun1lsa5	to!cl!cllst9	topp2sun1
ql!cl!ppn1	sa>	to!cl!clsu1	toppn3ppz1sun1
ql!po		to!cl!clsun2	tosu1
ql!po>		to!cl!clsun2lsa5	tosu1lsc5
ql!po>ppn1		to!cl!orsun1	tosu1sun1
			tosu1sun1lsc6lst7
			tosu1sun1lsn6
			tosu2
			tosu2lst6

tosun1	un1ppn1sun2	vi>	vipn2
tosun1lsa5	un1sun1su1sun1lsa1lsc4	vi>1	vipn2lsa4
tosun1su1sun1	un1sun1su1sun1lsa3lsc6	vi>1lsa2lsc8	vipn2lsc4
		vi>1pp2	vipn2lst3lsa4
tosun1su2lsn3lst6	un1sun1su2	vi>1ppn1ppz1ppq1	vipn2ppz1ppq1
tosun2	un1sun1su2lsa5	vi>1ppz1ppq1	vipn2ppz1ppq1lst2lsa8
tosun2lsa6	un1sun2	vi>2	vipn2ppz1sun1lsa5
to~	un1sun2su2	vi>lsa6	vipn2sun1
tr	un2	vi>lsc6	vipn2sun1lsa4
tr>	un2lsm1	viS	vipn3
trS	unlsm1	vilss1	vipn3su4
trSlsc1	unlsm2lss3lst8	vilss2	vipn3sun1lsa5
trlss1lss3	unlst1	vilss1	vipp2su2
trlst3lshp7	unlst2	vilst1	vipp2sun1lsa5
	unlst8	vilst2	vipp3
trsu2	unppn1ppz1sun1	vilst2lsa8	vipp3lsn3
trsu2lst3lsm8	unppn1ppz1sun1lsa5	vilst9	vipp4
trsun1su2	unppn1sun1su2	vipp2ppn1	vipp4lst2
trsun1su2lsa3	unppn1sun2	vipp2su2	vippn1pp1
trsun2	unppn1sun2	vipp2sun1lsa5	vippn1pp1ppz1
trsun2lsa5	unppn1sun2lsa5	vipp3	vippn1pp1ppz1lst8
trsux1	unppn1sux1	vipp3lsn3	vippn1pp1su1sun2
trsux1lsa5	unppn1sux1lsa5	vipp4	vippn1ppq1
trsux1lst8	unppn3sun1lsa5	vipp4lst2	visu1sun1
ts	unsun1su1	vippn1pp1	visu1sun1su1
ts1	unsun1su1lst2lsc6	vippn1pp1ppz1	visu1sun1su1lst6
ts>	unsun1su2	vippn1pp1ppz1lst8	visu1sun1su2
ts>1	unsun2	vippn1pp1su1sun2	visu1sun1su2lss1lst6
ts>lsc2	unsun2lsa5	vippn1ppq1	visu1sun2
ts>lsc6	unsun2su1	vippn1ppz1ppq1	visu1sun2lsa5
tslsa2	unsun2su2	vippn1su1	visu1sun2lsa6
tslsc2lst2	unsun3	vippn1su1sun1	visu2
tssun1lsa5	unsun3lsa3	vippn1su1sun1lst2	visun1su1sun1
tv	unsun3lsa6	vippn1su2	visun1su1sun1lst6
tvlsn2	unsux1	vippn1sux1	vs
un	vi		vsG
un!clG			
un1			
un1lst8			
un1ppn1ppq1sun2			
un1ppn1sun1su2lsa5			

# manuscript sources of the gregall font

*The list of glyphs uses following abbreviations for manuscript references; the page number is always for the start of some antiphon, responsory, mass propers, even when the actual neume is on a later page. At the end of lines, GT stands for Graduale Triplex, Solesmes, 1979, OT for Offertoriale Triplex, Solesmes, 1985, AM for Antiphonale Monasticum, Solesmes, 1934, ARII for Antiphonale Romanum II, Solesmes, 2009 and NR for Nocturnale Romanum, Hartker Verlag, 2002, followed by page number which also contains the corresponding propers, antiphons or responsories.*

*Most of the glyphs taken from the e-codices Virtual Manuscript Library of Switzerland, <http://www.e-codices.unifr.ch/en>, with permission from Stiftsbibliothek, St. Gallen <http://www.stibi.ch/> and Stiftsbibliothek, Einsiedeln <http://kloster-einsiedeln.ch/>, the picture fragments from there are only present in the font source file to help drawing the glyphs.*

## Cantatorium codex 359

C1 = [http://www.e-codices.unifr.ch/en/download/csg-0359\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0359_001/max)  
C25U Universi GT16  
C26A Alleluia Ostende GT16  
C26D Dilexisti iustitiam GT499  
C27E Ex Sion GT18  
C27Q Qui sedes GT22  
C28A Alleluia. Excita Domine GT23  
C28T Tollite portas GT25  
C32B Benedictus es in firmamento GT664  
C35Q Qui regis Israel intende  
C37A Alleluia. Veni, Domine GT36  
C38T Tecum principium GT42  
C38A Alleluia Dominus dixit GT43  
C39B Benedictus qui GT45  
C40A Alleluia Dies sanctificatus GT49  
C40V Viderunt omnes GT48  
C42A Alleluia. Hic est discipulus GT636  
C43A Anima nostra GT453  
C43L Laus tibi Christe  
C44E Ecce sacerdos GT486  
C44D Diffusa est gratia GT408  
C45S Speciosus forma GT54  
C46O Omnes de Saba GT57  
C46B Benedictus Dominus GT257  
C46A Alleluia Vidimus stellam GT58  
C47I Iuravit Dominus GT486  
C49I Inveni David GT445  
C50G Gloriosus Deus GT456  
C52T Timebunt gentes GT265  
C52P Posuisti Domine GT477  
C53S Suscepimus Deus GT360  
C53A Alleluia. Adorabo ad templum GT270  
C54A Audi filia GT417  
C56B Beatus vir GT475  
C56D Desiderium animae GT432  
C57B Beatus vir GT481  
C58A Adiutor GT69  
C59D De profundis GT673  
C60S Sciant gentes GT88  
C60C Commovisti Domine GT89  
C61T Tu es Deus GT275  
C61I Iubilare Domino GT185  
C62M Miserere mei GT63  
C64Q Qui habitat GT73  
C67D Dirigatur GT340  
C71L Laudate Dominum GT187  
C73P Propitius esto GT288  
C74B Bonum est GT327  
C78O Oculi omnium GT343  
C79L Laetatus sum GT336  
C80Q Qui confidunt GT109  
C81E Exsurge Domine GT114  
C82B Beata gens GT333  
C82R Respice Domine GT320  
C82V Venite filii GT298  
C84T Tibi Domine GT118  
C87E Exaltabo te GT112  
C88T Tollite hostias GT272  
C89T Tenuisti manum GT133  
C95D Domine exaudi GT172  
C97D Domine audivi  
C100C Crux fidelis GT182  
C103C Cantemus Domino GT186  
C104V Vinea facta GT188  
C107A Alleluia Pascha nostrum GT197  
C118C Clamaverunt iusti GT454  
C122I In omnem terram GT427  
C123C Constitues eos GT426

C132D Domine praevenisti GT509  
C134B Benedicite Dominum GT608  
C137A Audi filia GT406  
C139A Alleluia Benedictus es GT375  
C139B Benedictus es GT372  
C145L Liberasti nos GT366  
C148A Alleluia Domine refugium GT321  
C148Q Alleluia Quoniam Deus GT327  
C148V Alleluia Venite GT324  
C149A Alleluia. Paratum cor meum GT344  
C150L Alleluia Laetatus GT19  
C153S Alleluia Sancti tui, Domine, benedicti GT463  
C153B Alleluia Beatus vir qui suffert GT511  
C154A Alleluia Gaudete iusti GT430

## Einsiedeln codex 121

E1 = [http://www.e-codices.unifr.ch/en/download/sbe-0121\\_001/max](http://www.e-codices.unifr.ch/en/download/sbe-0121_001/max)  
E2R Respice in me OT5  
E2D Dominus dabit GT17  
E3D Deus tu convertens GT20  
E10P Prope est Dominus GT35  
E11C Confortamini OT9  
E13P Prope es tu GT24  
E16B Benedictus es  
E20E Exsulta satis GT28  
E23T Tollite portas OT14  
E26L Lux fulgebit GT44  
E29E Exsulta filia sion GT47  
E31T Tui sunt caeli OT18  
E33V Viderunt omnes GT50  
E34I In virtute tua OT152  
E35E Elegerunt apostoli OT161  
E39E Exiit sermo inter GT636  
E42A Anima nostra GT466  
E51R Reges tharsis OT21  
E64L Laetamini in Domino OT140  
E69P Posuisti Domine GT477  
E75G Gaudeamus omnes GT545  
E82D De profundis GT673  
E92I Immutemur GT65  
E104S Sicut oculi GT77  
E125P Precatus est Moyses GT317  
E130I Illumina oculos GT290  
E131O Oculi mei semper GT96  
E133I Iustitiae Domini GT309  
E147L Laetare Ierusalem GT108  
E148L Laudate Dominum GT110  
E155B Benedicite gentes Domino GT231  
E158D Domine ad adiuvandum OT42  
E161S Sitientes venite GT114  
E162F Factus est Dominus GT119  
E166C Confitebor tibi Domine OT44  
E173E Eripe me GT129  
E193D Domine, exaudi orationem OT53  
E195D Dominus Iesus GT165  
E205R Resurrexi GT196  
E248V Viri Galilaei GT235  
E255S Spiritus Domini GT252  
E256C Confirma hoc OT79  
E262S Sapientiam sanctorum GT452  
E272M Mihi autem nimis OT128  
E293V Vindica Domine  
E320I Inclina aurem GT300  
E327O Oravi Deum meum OT107  
E324R Respice, Domine GT320  
E336I In voluntate tua GT346  
E339S Si iniquitates GT350  
E373B Benedictus es GT372  
**Hartker codex 390/391**  
H1 = [http://www.e-codices.unifr.ch/en/download/csg-0390\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0390_001/max)

H195 = [http://www.e-codices.unifr.ch/en/download/csg-0391\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0391_001/max)  
H16A Aspiciebam in visu NR111  
H16M Missus est Gabriel NR111  
H16V Ave Maria NR113  
H22S Sicut mater consolator NR127  
H23E Egredietur Dominus de Samaria NR129  
H25E Ecce mitto Angelum AM201  
H26G Grata facta est NR25\*  
H28Q Qui venturus est NR134  
H29E Ecce radix Jesse NR137  
H32N Nascetur nobis NR149  
H33I Iuravi dicit Dominus NR151  
H34F Festina ne tardaveris NR130  
H35G Germinaverunt campi NR144  
H36A Adnuntiatum est  
H48B Beata et venerabilis  
H50Q Quem vidistis pastores AM240  
H72V Venit lumen tuum AM290  
H72H Hodie in Iordane NR229  
H730 Omnes de Saba NR237  
H73S Stella ista NR242  
H74I Illuminare, illuminare NR236  
H75I In columbae specie NR231  
H75V Videntes stellam NR242  
H77S Stella ista AM291  
H77A Ab Oriente AM297  
H87E Exaudi Deus  
H103S Spes nostra salus NR512  
H103M Magnus Dominus NR516  
H104T Te Deum patrem  
H112S Stans a dextris AM798  
H114C Corde et animo AM1033  
H114N Nativitas tua AM1035  
H118G Gaude, Maria Virgo NR130\*  
H119C Cum inducerent  
H173I Insurrexerunt in me NR364  
H173C Contumelias et terrores NR365  
H179L Liberavit Dominus ARII183  
H179A Amicus meus osculi NR381  
H179I Iudas mercator NR382  
H219T Tradiderunt me NR408  
H219I Iesum tradidit impius NR409  
H266D Domino si in tempore  
H269S Spiritus Sanctus  
H269D Dum complerentur NR493  
H269R Repleti sunt omnes NR494  
H270S Spiritus Domini AM520  
H271L Loquebantur variis AM521  
H297B Beatam me dicent NR[172]  
H305H Hodie nata est NR278\*  
H305G Gloriosae virginis Mariae NR279\*  
H306N Nativitas gloriosae NR280\*  
H307N Nativitas tua NR281\*  
H307F Felix namque NR[171]  
H320R Regem confessorum  
H322B Beatus Gallus zelo  
H322C Columbanus itaque beato  
H323B Beatus Gallus cum  
H323D Domine Iesu Christe  
H324P Pater sanctus  
H324V Vir Deo plenus  
H325I Iste sanctus digne  
H367V Viri sancti NR[54]  
H424M Magnificat  
H428A Ascendens Iesus AM593  
H443V Venite exsultemus NRXXVIII

#### St. Gall codex 339

G1 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_033/max](http://www.e-codices.unifr.ch/en/download/csg-0339_033/max)  
G56 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_088/max](http://www.e-codices.unifr.ch/en/download/csg-0339_088/max)  
G57 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_088a/max](http://www.e-codices.unifr.ch/en/download/csg-0339_088a/max)  
G58 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_089/max](http://www.e-codices.unifr.ch/en/download/csg-0339_089/max)  
G8E Exulta satis OT11  
G9A Alleluia Veni Domine GT36  
G11P Puer natus est GT47  
G11V Viderunt omnes GT48  
G12T Tui sunt caeli OT18  
G20I Iubilare Deo universa terra GT227  
G22D Domine quinque talenta GT515  
G25P Posuisti Domine GT477  
G30E Exsurge quare obdormis GT91  
G35D Domine vivifica me OT31  
G42D Domine Deus salutis OT112  
G44P Precatus est Moyses GT317  
G45D Domine in auxilium OT106  
G51I Intende voci GT280  
G51S Si ambulabem GT125  
G57F Factus est Dominus GT119  
G89D Domine Deus in simplicitate OT159  
G113A Alleluia. Dilexit Andrean GT625  
G116C Cantabo Domino GT283  
G126D Alleluia. Domine Deus meus GT282  
G128A Alleluia. Attendite popule  
G132A Alleluia. Mirabilis Dominus GT462  
G132V Alleluia. Vox exultationis  
G139A Asperges me Domine  
G140O Oremus dilectissimi nobis  
G141O Omnipotens Deus

#### St. Gall codex 376


N1 = [http://www.e-codices.unifr.ch/en/download/csg-0376\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0376_001/max)  
N39H Hodie cantandus est nobis  
N53A Audite fratres dilecti  
N59N Nativitatem venerandam  
N65G Gloriatu laus tua Deus  
N67G Gloria in excelsis Deo  
N68G Gloria in excelsis Deo  
N69G Gloria in excelsis Deo  
N73G Kyrie eleison  
N86D Dilexisti iustitiam GT498  
N100T Tui sunt caeli OT18  
N171D Deus exaudi orationem GT107  
N221N Alleluia. Non vos relinquam GT242  
N270A Alleluia. Benedictus es GT375  
N293A Alleluia. Sancti tui, Domine, benedicent GT463  
N296V Alleluia. Veni Sancte Spiritus GT263  
N363C Carmen suo dilecto  
N368L Letamente canamus Domino nostro  
N372O O quam mira sunt Deus


#### St. Gall codex 374

A1 = [http://www.e-codices.unifr.ch/en/download/csg-0374\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0374_001/max)  
A17T Tui sunt caeli OT18  
A22V Vox in Rama GT638  
A26F Fili quid fecisti GT51  
A56C Custodi me Domine GT304  
A127E Exultabunt sancti OT143  
A167O Oravi Deum meum OT107  
A174A Alleluia. Eripe me GT308

































































#### Bamberg, lit. 6, Gradual of St. Emmeram





























































B9v = <http://bsbsbb.bsb.lrz-muenchen.de/~db/0000/sbb00000128/images/index.html?id=00000128no=19&seite=22&signatur=Msc.Lit.6>  
B9vA Anima nostra GT466

<b>virga</b>			
vi	C780	tu	
vilsc3	C82R	testamentum	
vilst1	E29E	rex	2.166x
vi-	C80Q	montes	
vi>	C27E	eius	
vi-lst3	H50Q	Quem	
vi->	E20E	sanctus	2.166x
<b>tractulus</b>			
ta	C26A	Domine	
talsc3	E262S	saeculum	2.166x
talst2	C56D	Desiderium	
ta-	C81E	antiquis.	
ta>	C25U	et	
suv1 Cf. 	pesu2suv1		
<b>punctum</b>			
pu	C137A	Audi	
st			
ci>			
<b>gravis</b>			
gr	H271L	Loquebantur	
gr-	H270S	Spiritus	
gr-lsc6	H270S	replevit	
<b>clivis</b>			
cl	C780	sperant	
cllsc3	C26A	nobis	
cllst2	C25U	exspectant	
cl-lst2	C52P	pretioso.	
cl-	C780	omnium	
clS-	C81E	opem	
clS	C780	opportuno.	
clS1	H424M	potentiam	
clM	C148V	nostro	
cl>			
cl>1	H36A	virginis	
vi>			
cl->1	H50Q	natum	
cl->	H50Q	angelorum	
clM-	C27Q	super	
clS-1	H428A	navem	
<b>pes</b>			
pe	C80Q	Domine	
pe-	C80Q	aeternum	
pe-1	C64Q	Scapulis	
peS	C780	in	
peG	B9vA	erepta	0.5x
peG			
pe>	C100C	germine	
pe>1	C27E	eius	
pe>2	C71L	miser cordia	
pe->	N296V	tuorum	
ta>			
pe->1	H35G	Germinaverunt	1.7x
<b>porrectus</b>			
po	C139B	super	
polsc2	C82R	iudica	
po-	G20I	anime	0.85x
po-1	C26A	tuum	
poG	C40V	salutare	
po>	C80Q	commovebitur	
po~	C58A	aeternum	
poG-	A1670	meum	
posu2	C460	gloria	
po-1su2	H269R	alleluia	
<b>torculus</b>			
to	C780	Domine	
tolsc3	C39B	nomine	
tolsc41st3	E125P	Domine,	2.166x
tolst2	C74B	miser cordiam	
to-	G44P	animae	
to-1	C139A	nostrorum	
toS	C38A	hodie	
toS1	E205R	Resurrexi,	0.5x

toS2	E161S	Sitientes	1.75x
toS3	C104V	circumfodit	
toG	G12T	eius	
toM	C49I	servum	
toM1	H22S	auxilium	1.71x
toM3	C39B	mirabile	
to>	C26A	miser cordiam	
pe>			
toS31st2	C59D	tuae	
pq!cl-	C87E	sanasti	
to>1	E130I	obdormiam	2.166x
to>2	H219T	fortes:	1.63x
to->	E158D	respexit	2.166x
toS2sux1	C460	Surge	
<b>climacus</b>			
ci	C26A	tuum	
ci1	G73P	gentes	
cilsc3	C74B	tuo	
ci-	C81E	nos	
ciS	C81E	Domine	
ciS1	C139A	Deus	
visut1su2	C53A	Adorabo	
ciG	C64Q	lapidem	
ciG1	C42A	ille	
ciM	C154A	Alleluia	
ci>	C460	orta	
cl>	C79L	domum	
visuv1su2	C35Q	nos	
visut3	C38T	meo	
visu1suu1	C26D	laetitia.	
visut4	C25U	me.	
cl-1su2	C40A	magna	
visu1sut2	C43L	Domine	
visu1suv1	C53S	terrae.	
visuu1su2	C56D	eius	
visuu2su2	H103S	salus	
vi-suu2su2	H103S	o	
visu2suw1	G113A	Alleluia	0.85x
visut2su2	G128A	Alleluia	0.85x
visut3suw1	C153S	dicent.	
visu1sut1sux1	G126D	salvum	0.85x
visu1sut1su2	N39H	puer	
visu1sut1su1sut1	N39H	generavit	
vi-su1sut1su2	N39H	enim	
visut1sux1	N59N	filium	
clSsu1sut1	N65G	tui	
vi-su4	N68G	Amen.	
vi-su1sut2su1	N73K	Christe	
visu1sut1suy1	N221N	Alleluia.	
visut3suy1	N293A	dicent.	
visut2suy1	N363C	sacro	1.25x
visu5	N368L	fornacibus	1.25x
visu1suu1su2	N3720	erogatione	1.25x
vi-su1suu2	A174A	meus	
vi-su1suu1su1	A174A	Alleluia.	
cl-sut2	H74I	illuminare	
clS-su2	C46A	eius	
vi-suu1su2	H75I	sanctus	
clSsut2	E51R	suscipiant	2.0x
vi-sut3	H269D	dicentes	
vi-su1sut1 Cf. 	vi-su1sut1su2 minus subpunctis		
vi-su2sut1	N296V	alleluia	
vi-su1sux1	E373B	Sanctum	2.133x
vi-su2sux1	C49I	eum	
vi-sut4	H16A	servient	1.7x
vi-suu2	H23E	ecce	1.7x
vi-suu3	H35G	veniet	1.7x
visu2sux1	H48B	mater	1.7x
vi-sut1su2	H22S	elegi	1.71x
vi-su1suu1	H114C	gloriam	1.71x
vi-su1suu1su2	H114N	nobis	1.71x
vi-su1sut2	H324P	aetatis	2.0x
vi-su3	H307F	natalem	2.0x



	vi-sut1suu1	325I	peregrinatione	2.0x
	<b>scandicus</b>			
	sc	G11P	imperium	0.85x
	sc1 <i>Cf.</i>	vipp4	minus first punctum	
	sc-	C123C	terram	
	scS	C154A	Alleluia	
	scG	H179I	Iudas	
	scG1	C52P	Posuisti	
	scM1	C67D	Domine	
	sc>	C26A	Alleluia	
<i>Cf.</i>	pe>2			
	vi-pp2	C26A	Domine	
	vi-ppt3	C27E	veniet.	
	scM2	C44E	Ecce	
	vi>ppt3	E2R	non	2.166x
	cl>ppt2	H730	annuntiantes	
	vi-!vi!vi	E155B	Benedicite	2.166x
	vippt3	G1400	ae	0.85x
	vi-pp4	C154A	rectos	
	vi-!vi-!vi	H118G	erubescat	
	vipp4	A127E	eum	
	vi>ppt2	H75V	apertis	
	<b>porrectus flexus</b>			
	pf	C27E	sacrificia	
	pflsc2	C58D	intendentes	
	pf1lsc2	C61I	Ipse	
	pflst2	C122I	finis	
	pf-	C81E	antiquis.	
	pfS	G116C	tribuit	0.85x
	sfM	E248V	alleluia,	2.166x
	pfM	E39E	manere	2.166x
	pf>	C95D	manducare	
<i>Cf.</i>	po>			
	pfMsut1	E34I	eum	2.166x
	<b>pes subbipunctis</b>			
	pesu2	C81E	antiquis.	
	vippt1su2lsc3	C61T	solus:	
	pe-su2	H73S	adoraverunt	
	pe-1su2	C64Q	habitat	
	pe-1sut2	H104T	confitemur	
	pe-1sut1suw1	H219I	videret	1.63x
	peSsu2	A17T	eius	
	peSsut2	C27E	sanctos	
	vippt1su2	C56B	benedicetur.	
	toS2sut1	C139A	Alleluia	
	vi-!ci	E272M	cognovisti	2.166x
	pesu1suw1	G8E	plebem	
	pe-su1sut1	N296V	alleluia	
	pe-su2suy1	N296V	alleluia	
	pe-1sut3	H179A	malum	
<i>Cf.</i>	to>			
	pesu1suu1	C27E	Deus	
	pesu3	C27Q	regis	
	vippt1su1sut1	C40V	omnes	
	vippu1su2	C74B	Altissime.	
	pesu1sut3	C60S	venti.	
	pesu2suv1	C60C	Sana	
	vippu1su2lsc3	C32B	caeli	
	pe-1su1suu1	C61I	pascuae	
	peSsu1sux1	G89D	fili	0.85x
	pe-su3sut1	N270A	saecula.	
	pe-1sut1sux1	H72V	orta	
	peSsut3	C460	Jerusalem	
	pesut2	H77S	magi	
	pe-1suw2	E255S	Domini	2.133x
	peSsut1su2	E13P	Domine	2.133x
	pesu1sux1	H25E	angelum	1.7x
	pe-1su1suw1	H29E	deprecabuntur	1.7x
	pesu1sut1 <i>Cf.</i>	pesu1sut3	minus 2 tractulis	
	pe-1su1sut1	H306N	de	2.0x
	pe-1su1sut2	H305G	Mariae	2.0x
	pe-1su1suu2	H305G	vidente	2.0x
	pe-su4	C139A	Alleluia	

	pesuv1su1sut1	C139A	Alleluia	
	<b>scandicus flexus</b>			
	sf	C64Q	habitat	
	sflsc3	C27E	Deus	
	sf-	C39B	est	
	sfS	C97D	Deus	
	toppu1	C103C	Cantemus	
<i>Cf.</i>	sfM			
<i>Cf.</i>	sc>			
	to>pp2	E324R	testamentum	2.0x
	<b>torculus resupinus</b>			
	tr	C25U	edoce	
	trlst2	E69P	eius	2.0x
	tr-1	C38T	meo	
	trS	C58A	Domine	
	trG	E336I	fecisti	2.166x
	trG1	G25P	ei	
	trG2	E147L	Laetare	2.166x
	trM	E336I	resistere	2.166x
	tr>	C82V	nonconfundentur	
	tr~	C60S	Altissimus	
	tr~~	C27Q	et	
	tr~~1	C107A	Alleluia.	
	trS-	C89T	pedes,	
	trS1	E26L	eeieieue	2.166x
	tr-3	H323D	honore	2.0x
	<b>strophæ</b>			
	st	C80Q	commovebitur	
	st-	C52P	Desiderium	
	stS	E263V	est.	2.166x
	st>	C49I	servum	
	<b>distrophæ</b>			
	ds	C460	super	
	ds1s6	C45S	forma	
	ds-	C81E	Domine	
	ds>	C38A	Alleluia	
	<b>tristrophæ</b>			
	ts	C80Q	Dominus	
	ts1s6	C44D	mansuetudinem	
	ts-	C150L	ibimus	
	tsM	C62M	anima	
	ts>	C62M	conculcantes	
	tsM-	A26F	ego	
	<b>trigonus</b>			
	tg	C80Q	aeternum	
	tg1	C81E	antiquis.	
	tgS	C139B	omnibus	
	tgS1	N171D	mei	
	tgS3	C61I	laetitia.	
	tgM	C118C	Dominus	
	tgS-	C118C	Dominus	
	tgS4	C86D	mei	
	<b>bivirga</b>			
	bv	C26D	Propterea	
	bv-	C82B	populus	
	bv>	H33I	montes	
	<b>trivirga</b>			
	tv	C56D	pretioso	
	tv-	C61I	eius.	
	<b>pressus</b>			
	pr	C26A	Alleluia	
	pi	C82R	Domine,	
	prlsc2	E339S	Si	2.166x
	pr-lsc3	C122I	Dei	
	prlst2	C145L	tuo	
	pilsc2	C122I	Dei	
	pilst2	C26A	Alleluia	
	pr-	C59D	Si	
	prM	E173E	insurgentibus	2.166x
	pr>	H72H	in	
	pi>	H103M	Magnus	
<i>Cf.</i>	vs>			
<i>Cf.</i>	or>			

	<b>virga strata</b>			
<i>~</i>	vs	C148A	generatio	
<i>~</i>	vs1sc3	C39B	nomine	
<i>~</i>	vs1st2	E195D	suis,	2.166x
<i>~</i>	vs-	C82B	Domini	
<i>~</i>	vs>	C64Q	pennis	
<i>Cf. ~</i>	ta>			
<i>~</i>	vs->	A22V	Rama	
	<b>oriscus</b>			
<i>~</i>	or	H112S	candidior	
<i>~</i>	or>	C148V	salutari	
	<b>salicus</b>			
<i>~</i>	sa	C27E	super	
<i>~</i>	sa1	C148A	Alleluia.	
<i>~</i>	<b>salsfr1</b>	E3D	Deus	2.166x
<i>~</i>	sa-	C25U	tuas	
<i>~</i>	sa-1	G30E	tribulationis	
<i>~</i>	saG	C107A	Alleluia.	
<i>~</i>	saM	H16V	venient	1.7x
<i>~</i>	saM1	H23E	homo	1.71x
<i>~</i>	saM2	C27Q	regis	
<i>~</i>	saM4	E10P	omnis	2.166x
<i>~</i>	sa>	C27E	sanctos	
<i>~</i>	sa->1	H77A	magi	
<i>Cf. ~</i>	pe>2			
<i>~</i>	sa!clS1	C80Q	sicut	
<i>~</i>	sa!clS-1	C27Q	tuam	
<i>~</i>	sa!clS1sc2	C46B	Deus	
<i>~</i>	sa-lsfr1	C134B	nomen	
<i>~</i>	sa1!cl>	G45D	respexit	0.85x
<i>~</i>	sa!cl>	G22D	euge	0.85x
<i>~</i>	sa!cl	G1410	fortitudo	0.85x
<i>~</i>	saM-1	G139A	Domine	0.85x
<i>~</i>	sa!cl-	G132V	Alleluia.	0.85x
<i>~</i>	saM3	N53A	fratres	
<i>~</i>	saM-4	N296V	amoris	
<i>~</i>	sa>2	H73S	viderunt	
<i>~</i>	sa1!cl->	H32N	eius	1.7x
<i>~</i>	sapp1	H320R	venite	2.0x
	<b>pes quassus</b>			
<i>~</i>	pq	C27E	sacrificia.	
<i>~</i>	pqlsfr1	C150L	nostri	
<i>~</i>	pq-	C148V	nostro	
<i>~</i>	pq>	C84T	pupillo	
<i>~</i>	pqS	C52T	maiestate	
<i>~</i>	pqS>	H424M	potentiam	
<i>~</i>	pq!cl>	G57F	firmamentum	0.85x
<i>~</i>	pq!cl	E23T	Domini	2.166x
	<b>quilisma</b>			
<i>~</i>	q1	C80Q	commovebitur	
<i>~</i>	qi	C103C	Hic	
<i>~</i>	q1-	C148A	generatio	
<i>~</i>	qi-	H28Q	veniet.	
<i>~</i>	q1>	C40V	gentium	
<i>~</i>	qi>	C28A	et	
	<b>pes stratus</b>			
<i>~</i>	pt	G1400	ae	0.85x
	<b>subpunctis</b>			
<i>~</i>	su2 Cf. <i>~</i>	ci		
<i>~</i>	su3 Cf. <i>~</i>	ci1		
<i>~</i>	su1sut1 Cf. <i>~</i>	ciS		
<i>~</i>	sut2 Cf. <i>~</i>	ciS1		
<i>~</i>	suu1su2 Cf. <i>~</i>	visuu1su2		
<i>~</i>	su1suw1 Cf. <i>~</i>	ciM		
<i>~</i>	su1sux1 Cf. <i>~</i>	ci>		
<i>~</i>	su1sut2 Cf. <i>~</i>	visu1sut2		
<i>~</i>	su1suu1 Cf. <i>~</i>	visu1suu1		
<i>~</i>	su2suw1 Cf. <i>~</i>	visu2suw1		
<i>~</i>	su2sux1 Cf. <i>~</i>	vi-su2sux1		
<i>~</i>	sut1su2 Cf. <i>~</i>	visut1su2		
<i>~</i>	sut1suw1 Cf. <i>~</i>	pe-1sut1suw1		
<i>~</i>	sut3 Cf. <i>~</i>	visut3		

<i>~</i>	su1su2 Cf. <i>~</i>	visuv1su2	
<i>~</i>	sut4 Cf. <i>~</i>	visut4	
<i>~</i>	su1suv1 Cf. <i>~</i>	visu1suv1	
<i>~</i>	suu2su2 Cf. <i>~</i>	vi-suu2su2	
<i>~</i>	sut2su2 Cf. <i>~</i>	visut2su2	
<i>~</i>	su1sut3 Cf. <i>~</i>	pesu1sut3	
<i>~</i>	su2suv1 Cf. <i>~</i>	pesu2suv1	
<i>~</i>	sut3suw1 Cf. <i>~</i>	visut3suw1	
<i>~</i>	su1sut1sux1 Cf. <i>~</i>	visu1sut1sux1	
<i>~</i>	su1sut1su2 Cf. <i>~</i>	visu1sut1su2	
<i>~</i>	su1sut1su1sut1 Cf. <i>~</i>	visu1sut1su1sut1	
<i>~</i>	sut1sux1 Cf. <i>~</i>	visut1sux1	
<i>~</i>	su4 Cf. <i>~</i>	vi-su4	
<i>~</i>	su1sut2su1 Cf. <i>~</i>	vi-su1sut2su1	
<i>~</i>	su1sut1suy1 Cf. <i>~</i>	visu1sut1suy1	
<i>~</i>	sut3suy1 Cf. <i>~</i>	visut3suy1	
<i>~</i>	sut2suy1 Cf. <i>~</i>	visut2suy1	
<i>~</i>	su5 Cf. <i>~</i>	visu5	
<i>~</i>	su1suu1su2 Cf. <i>~</i>	visu1suu1su2	
<i>~</i>	su1suu2 Cf. <i>~</i>	vi-su1suu2	
<i>~</i>	su1suu1su1 Cf. <i>~</i>	vi-su1suu1su1	
<i>~</i>	su3sut1 Cf. <i>~</i>	pe-su3sut1	
<i>~</i>	suu2 Cf. <i>~</i>	ql-ppt1suu2	
<i>~</i>	su2sut1 Cf. <i>~</i>	vi-su2sut1	
<i>~</i>	su2suy1 Cf. <i>~</i>	pe-su2suy1	
<i>~</i>	suw2 Cf. <i>~</i>	pe-1suw2	
<i>~</i>	sut2suu1 Cf. <i>~</i>	ql-ppt1sut2suu1	
<i>~</i>	suu3 Cf. <i>~</i>	vi-suu3	
<i>~</i>	su1 Cf. <i>~</i>	ci	
<i>~</i>	sut1 Cf. <i>~</i>	ciS1	
<i>~</i>	su1suv1su2 Cf. <i>~</i>	ql-ppt2su1suv1su2	
<i>~</i>	sut1suu1 Cf. <i>~</i>	vi-sut1suu1	
<i>~</i>	suv1su1sut1 Cf. <i>~</i>	pesuv1su1sut1	
	<b>prepunctis</b>		
<i>~</i>	pp2 Cf. <i>~</i>	vi-pp2	
<i>~</i>	ppu2 Cf. <i>~</i>	scS	
<i>~</i>	ppt2 Cf. <i>~</i>	sfs	
<i>~</i>	ppu3	C47I	Sede
<i>~</i>	ppu4	C58A	Domine
<i>~</i>	ppu5	C50G	confregit
<i>~</i>	pp4	C780	escam
<i>~</i>	pp3 Cf. <i>~</i>	pp4	
<i>~</i>	ppt3 Cf. <i>~</i>	vi>ppt3	
<i>~</i>	ppt4	N69G	amin.
<i>~</i>	ppt5	A56C	videant
<i>~</i>	pp1 Cf. <i>~</i>	vi-pp2	
	<b>combined glyphs</b>		
<i>~</i>	cl!pi	C82R	Domine
<i>~</i>	cl!pilsc11st3	C89T	manum
<i>~</i>	cl!pilsc2	C149A	cantabo
<i>~</i>	cl!pr	G51S	ipsa
<i>~</i>	cl-!pi	E35E	illis
<i>~</i>	ql!cl	C148A	Domine
<i>~</i>	ql!cl!cl> Cf. <i>~</i>	ql!cl!cl>ppt1 minus tractulus	
<i>~</i>	ql!cl!pi Cf. <i>~</i>	ql!cl!pippt1 minus tractulus	
<i>~</i>	ql!pf-	G42D	mane
<i>~</i>	ql!pf	G35D	Domine
<i>~</i>	ql!cl-	C26A	Alleluia
<i>~</i>	ql!clM Cf. <i>~</i>	ql!clMppt1 minus tractulus	
<i>~</i>	ql!cl-> Cf. <i>~</i>	ql!cl->ppt1 minus tractulus	
<i>~</i>	ql!cl>	H26L	salva
<i>~</i>	ql!po	C148V	nostro
<i>~</i>	ql!po-1	C148A	Alleluia.
<i>~</i>	ql!po>	H33I	terram
<i>~</i>	ql!vs	C148A	refugium
<i>~</i>	ql!vssu2 Cf. <i>~</i>	ql!vsppt1su2 minus tractulus	
<i>~</i>	ql!vssut2 Cf. <i>~</i>	ql!vsppt1sut2 minus tractulus	
<i>~</i>	qi!vs Cf. <i>~</i>	qi!vssu2 minus subpunctis	
<i>~</i>	qi!vssu2 Cf. <i>~</i>	qi!vsppt1su2 minus tractulus	
<i>~</i>	ql-su1suu1 Cf. <i>~</i>	ql-ppt1su1suu1 minus tractulus	
<i>~</i>	ql-su1suv1su2 Cf. <i>~</i>	ql-ppt2su1suv1su2 minus tractulis	

qisut2 Cf.	qippt2sut2 minus tractulis	
ql-su3 Cf.	ql-ppt1su3 minus tractulus	
qlsut3 Cf.	qlppt1sut3 minus tractulus	
ql-su2 Cf.	ql-ppt1su2 minus tractulus	
ql-sut2	H73S cedebat	
ql-su1sux1 Cf.	ql-ppt1su1sux1 minus tractulus	
ql-su1sut2 Cf.	ql-ppt1su1sut2 minus tractulus	
ql-sut1sux1	H72H complacui	
ql-suu2 Cf.	ql-ppt1suu2 minus tractulus	
ql-sut2suu1 Cf.	ql-ppt1sut2suu1 minus tractulus	
qi-su2	H73S cedebat	
qi-su1sut2 Cf.	qi-ppt1su1sut2 minus tractulus	
qi-su1sux1	H26G certamine	1.7x
ql-su1suu2	H34F facinora	1.71x
qi!cl	C82B spiritu	
qi!cl-	C148A factus	
qi!cl>	H77S Magi	
qi!po	H87E Deus	
qi!po>	H173C adversum	1.9x
pf!clM-ppt1	E3270 narante	2.166x
cl!po>ppt1	E3270 narante	2.166x
qlppt1	C38T Sede	
qippt1	C37A Domine	
qi!clppt1	C88T hostias,	
ql-ppt1	C26D laetitiae.	
ql>ppt1	C38T virtutis	
qi>ppt1	C60S terram.	
qisut1sux1	H269S linguarum	
qlsut2	H269D alleluia	
qi-sut2	H269D alleluia	
qi-ppt1su1sut2	H269R magnalia	
ql!cl>ppt1	H730 aurum	
ql!clppt1	C39B Domini:	
ql!cl!cl>ppt1	E133I corda	2.166x
ql!cl!pippt1	E31T maris	2.166x
ql!cl-ppt1	C40A terram.	
ql!clMppt1	E324R tuum	2.166x
ql!cl!>ppt1	G132A Alleluia.	0.85x
ql!clS-2ppt1sut1	E3D et.	2.0x
ql!clS-2sut1 Cf.	ql!clS-2ppt1sut1 minus tractulus	
ql!clS-2ppt1 Cf.	ql!clS-2ppt1sut1 minus tractulus	
ql!clS-2 Cf.	ql!clS-2ppt1sut1 minus 2 tractulis	
ql!poppt1	C59D Domine.	
ql!po-1ppt1	C58A homo.	
ql!po-ppt1	H179L pauperem	
ql!po- Cf.	ql!po- minus tractulus	
ql-ppt1su2	H72V Jerusalem	
ql-ppt1su1sux1	H730 Reges	
ql-ppt1su1sut2	H75I patris	
ql-ppt1suu2	H72H Hic	
ql-ppt1sut2suu1	H16M altissimi	1.7x
ql!vsppt1su2	H730 Domino	
ql!vsppt1 Cf.	ql!vsppt1su2 minus subbipunctis	
ql!vsppt1sut2	H73S gaudio	
qi!vsppt1su2	H74I Domini	
qi-sut3	H322B in	2.0x
ql-ppt1su1suu1	H305H David	2.0x
ql-ppt1su3	H323D subire	2.0x
qlppt1sut3	H305G Redemptorem	2.0x
ql-ppt2su1suv1su2	H306N illustrat	2.0x
ql-su1sut1	H307F iustitiae	2.0x
qippt2sut2	H297B generationes	2.0x
ql!vssu3	H443V ei	2.0x
to!ciG	E51R eum	2.0x
to!ciG	C28T gloriae.	
to!cl	C84T pupillo	
to!cl!cl!cl	C64Q sepavit,	
to!cl!po	E31T veritas	2.166x
to!cl!po-1	N100T veritas	
to!cl!pi	C45S mea	
to!cl-	N86D propterea	
to!cl!cl-	C54A Adducentur	
to!cl-1	C45S filiiis	

to!clS	C43A	terram.	
to!cl!cl	C43A	Domini,	
to!po	C64Q	sagitta	
to!posu2	C49I	eo,	
to!pr	G11V	Deo	0.85x
to!pi	C60C	tui.	
toSsu2	H72H	mihi	
pf!cl-	G51I	meus	
pf!clM- Cf. <i>not</i>	pf!clM-	ppt1 minus tractulus	
pf!pr	G9A	Alleluia	
cl!po> Cf. <i>not</i>	cl!po>ppt1	minus tractulus	
cl!cl>1	N67G	mundi	
cl!clSsut2	E256C	psallite	2.166x
cl!clS Cf. <i>not</i>	cl!clSsut2	minus 2 tractulis	
cl!po	C26A	nobis.	
cl!po-1	H119C	in	
tr-1su2	H730	dona	
trSsut2	H305H	devotissime	2.0x
ci-pp2	H73S	magno	
toS2su2	H73S	eam	
toS2sut2	C150L	dicta	
to-1su2	H322C	ostendere	2.0x
to-1su1	H323B	Gallus	2.0x
to-1suu1	H173I	me	1.8x
to-1suu1su2	H324V	cognovi	2.0x
po-1pp2su1sux1	H323D	desiderium	2.0x
po-1su1sux1 Cf. <i>not</i>	po-1pp2su1sux1	minus bipunctis	
pisu1	H307N	annuntiavit	2.0x
pisut1	C153B	Alleluia	
pq-su2	C132D	praetioso	
pe!vi	C57B	qui	
tgsuu1	C49I	eum.	
tgSsuu1	C57B	nimis.	
sa-su2sut1	C49I	eum	
significant letters			
lsam	C87E	abstraxisti	altius
lsal	E20E	Sion,	altius mediocriter
lsb	C39B	Domino	bene
lsc	C27E	eius	celeriter
lscw	C148V	nostro.	celeriter (wide form)
lscu	C134B	nomen	coniunguntur
lscm	C58A	oblivio	celeriter mediocriter
lsd	E11C	Virgo	deprimatur
lse	C84T	adiutor	equaliter
lsew	H266D	si	equaliter (wide form)
lseq	C64Q	viis	equaliter
lsfid	E16B	Domino	fideliter
lsfr	C58A	non	frendor
lsg	C27Q	ovem	guttur
lsi	C87E	Domine	iusum
lsim	E336I	universa	iusum mediocriter
lsiv	E92I	misericors	iusum valde
lsk	C62M	confidit	klenge
ls1	C38T	Tecum	levare
ls1b	C58A	non	levare bene
ls1c	E151A	ab	levare celeriter
ls1en	C59D	servitui.	leniter
ls1m	C38T	Tecum	levare mediocriter
ls1p	E161S	dicit	levare parvum
ls1t	E148L	Laudate	levare tenete
lsm	C38T	principium	mediocriter
lsmoll	E33V	fines	molliter
lsp	C64Q	altissimi	parvum
lspar	E104S	miserere	paratim
lspfec	E2D	fructum	perfecte
lspm	C40V	suam.	parvum mediocriter
lspulcre	E64L	hac	pulcre
lss	C27E	sanctos	sursum
lssb	C40V	iustitiam	sursum bene
lssc	C84T	Tibi	sursum celeriter
lssimil	E193D	ne	similiter
lssimul	E42A	sumus.	simul
lssm	C59D	Si	sursum mediocriter
lsst	C87E	Domine	sursum tenere
lssta	C27E	Congregate	statim

┐	lst	C39B	Domino	tenete	
┐	lstw	C58A	non	tenete (wide form)	
┐	lstb	C39B	Domino	tenete bene	
┐	lstm	E3D	tu	tenete mediocriter	2.166x
✓	lsv	E1310	semper	valde	2.0x
uol	lsvol	C58A	aeternum	volubiliter	
x	lsx	C87E	me:	expectare	

# manuscript sources of the grelaon font

*The list of glyphs uses following abbreviations for manuscript references; the page number is always for the start of some antiphon, responsory, mass propers, even when the actual neume is on a later page. At the end of lines, GT stands for Graduale Triplex, Solesmes, 1979, OT for Offertoriale Triplex, Solesmes, 1985, GN for Graduale Novum de Dominicis et Festis, Conbrio Verlag Regensburg, 2011, followed by page number which also contains the corresponding propers, antiphons or responsories.*

*All the grelaon font glyphs taken from the LAON\_BM\_ms239 codex with the permission from the Bibliothèque municipale de la ville de Laon <http://manuscrit.ville-laon.fr>, the picture fragments from there are only present in the font source file to help drawing the glyphs.*

## Graduale Laudunensis, codex 239

L1 = [http://manuscrit.ville-laon.fr/\\_app/\\_visualisation.php?cote=Ms239&vue=9](http://manuscrit.ville-laon.fr/_app/_visualisation.php?cote=Ms239&vue=9)

L8U Universi qui te GT16  
L8A Ad te Domine levavi OT5  
L8D Dominus dabit GT17  
L9E Ex Sion species GT18  
L10I Ierusalem surge GT20  
L11Q Qui sedes, Domine GT22  
L13A Ave Maria GT36  
L14P Prope es tu Domine GT24  
L14O Ostende nobis GT31  
L17H Hodie scietis GT38  
L19B Benedictus qui venit GT45  
L20P Puer natus est GT47  
L24D Dextera Domini GT194  
L24T Timebunt gentes GT265  
L25L Laetabitur iustus GT473  
L25M Mirabantur omnes GN232  
L28G Gaudeamus omnes GT545  
L31D De profundis GT673  
L33S Sciant gentes GT88  
L33C Commovisti Domine GT89  
L33P Perfice gressus OT90  
L34E Esto mihi in Deum GT275  
L35T Tu es Deus GT244  
L37M Misereris omnium GT62  
L37S Miserere mei Deus GT63  
L38I Iacta cogitatum GT285  
L40Q Qui habitat GT73  
L43L Levabo oculos meos GT78  
L43S Scapulis suis GT77  
L43I Sicut oculi servorum GT77  
L44D Domine refugium GT79  
L44I Dirigatur oratio GT340  
L45R Reminiscere miserationum GT81  
L53C Confitemini Domino GT158  
L54A Adiutor meus GT86  
L54B Benedicam Dominum OT88  
L56D Deus in adiutorium GT315  
L56S Salvum fac populum GT354  
L56I Iustus Dominus GT93  
L56P Propitius esto Domine GT288  
L58A Ad Dominum dum tribularer GT282  
L60E Exsurge Domine GT96  
L60A Ad te levavi GT97  
L61I Iustitiae Domini GT309  
L64O Oculi omnium GT343  
L64D Domine fac mecum OT37  
L67Q Qui biberit aquam GT99  
L67S Si ambulem GT125  
L68N Nemo te condemnabit GT124  
L68Q Qui confidunt GT109  
L71D Dum sanctificatus fuero GT249  
L72B Benedicite gentes GT231  
L75V Videns Dominus GT124  
L76E Eripe me Domine GT121  
L77S Saepe expugnaverunt GT122  
L77C Confitebor tibi Domine GT123

L78H Hoc corpus GT170  
L80S Sperent in te omnes GT286  
L81E Exaltabo te Domine GT112  
L81R Eripe me de inimicis GT129  
L82O Omnia quae fecisti GT342  
L82T Tollite hostias GT272  
L84B Benedictus es, Domine OT48  
L90D Deus Deus meus GT144  
L92E Exsurge Domine GT150  
L93E Erubescant et reveantur GT152  
L93G Ego autem dum mihi GT152  
L94C Custodi me Domine GT154  
L95D Domine, exaudi orationem GT172  
L99P Popule meus quid GT176  
L101V Vineam factam est GT188  
L103R Resurrexi GT196  
L103H Haec dies GT196  
L103P Alleluia Pascha nostrum GT197  
L103T Terra tremuit GT199  
L104I Introduxit vos Dominus GT200  
L105A Angelus Dominus GT217  
L105N Angelus Dominus GT201  
L106S Surrexit Dominus GT207  
L107H Haec dies GT206  
L109P Populus acquisitionis GT210  
L112D Deus Deus meus GT224  
L112O Omnes qui in Christo GT61  
L113E Ego sum pastor GT224  
L114C Cantate Domino GT225  
L114V Vocem iucunditatis GT229  
L117R Repleti sumus GT441  
L118E Ego sum vitis vera GT228  
L122N Non vos relinquam GT232  
L122V Viri Galilaei OT172  
L123A Ascendit Deus GT237  
L123E Exaudi Domine vocem GT241  
L125U Ultimo festivitatis GT251  
L125S Spiritus Domini GT252  
L126F Factus est repente GT256  
L128S Spiritus ubi vult spirat GT218  
L132E Ecce quam bonum GT351  
L136A Amen dico vobis quod vos GT436  
L138S Semel iuravi GT492  
L144C Clamaverunt iusti GT454  
L149E Ego dixi Domine GT279  
L149C Cantabo Domino qui bona GT283  
L152S Sicut in holocausto GT299  
L152I Inclina aurem tuam GT300  
L164D De profundis GT368  
L168I Iubilare Deo GT258  
L168S Specie tua GT416  
L168L Laudate Deum GT262  
L169A Adorabo ad templum GT270  
L173D Deus iudes iustus GT286  
L174D Domine in virtute tua GT292  
L174I In te Domine speravi GT296  
L174O Omnes gentes plaudite manibus GT298  
L174T Te dece hymnus GT305

	<b>uncinus</b>		
un	L78H	testamenti	
un1	L78H	calix	
un2 Cf.	un2lsm1	minus letter	
un2lsm1	L820	fecisti	
unlsm1	L75V	qui	
unlst1	L103R	alleluia	
unlst2	L820	fac	
unlst8	L24D	opera	
un1lst8	L1120	Christo	
unlsm2lss3lst8	L43S	scuto	
	<b>punctum</b>		
pu	L820	iudicio	
pu1	L56D	revereantur	
pulsnt3	L75V	flentes	
	<b>virga</b>		
vi	L820	Domine	
viS Cf.	vipp2su2	minus punctis	
vi>	L78H	in	
vi>1 Cf.	vi>1lsa2lsc8	minus letters	
vi>2	L820	nobiscum	
vilst1	L78H	meam	
vilst2	L95D	meus	
vilst9	L105A	quaeritis,	
vilss1	L103P	Alleluia.	
vilss2	L95D	avertas	
vilsst1	L103P	Alleluia.	
vilst2lsa8	L95D	eius.	
vi>lsa6	L78H	testamenti	
vi>lsc6	L56D	adiuvandum	
vi>1lsa2lsc8	L126F	loquentes	
	<b>tractulus</b>		
ta	L24T	tuam.	
ta>	L78H	dicit	
ta>1	L820	mandatis	
ta>2	L90D	sancto	
ta>lsn12	L45R	dominentur	
ta>2lsc2	L90D	Libera	
	<b>pes</b>		
pe	L78H	commemorationem	
peG	L78H	vobis	
pe>	L95D	exaudi	
pe>1	L78H	sanguine	
peG1	L67S	tua,	
pelsa2	L820	peccavimus	
pelsc2	L67S	tuus,	
pelsl2	L43L	iustitiam	
pelsm2	L81E	meam,	
pelsn2	L149C	qui	
pelsn3	L125S	replevit	
pelsst1	L103P	immolatum	
pelsst1lsm4	L44I	Elevatio	
pelst2	L103H	saeculum	
peGlsf1	L67S	non	
peGlsa6	L109P	vocavit	
pe>1lsa6	L114V	alleluia	
	<b>porrectus</b>		
po	L78H	facite	
poG	L64D	mecum	
poM Cf.	poMsun1	minus uncinus	
po> Cf.	po>pp2	minus prepunctis	
po>1	L81E	descendentibus	
polsf2lst3	L95D	meus	
polst2	L103H	saeculum	
	<b>clivis</b>		
cl Cf.	cllsn9	minus letter	
clG	L78H	hoc	
clG1	L105N	accedens	
clGlsa5	L820	obedivimus	
clGlsn12	L44I	Elevatio	
clM	L78H	quotiescumque	
cl>	L75V	monumentum	
cl>1	L34E	locum	

cllshn8	L640	imples
cllsn8	L95D	velociter
cllsn9	L67S	tua,
cllsst8	L640	imples
cllst9	L95D	tempus
cllsst6	L43L	mirabilia
cllsm2	L45R	nobis
cllsnt2	L92E	me
cl>lsa5	L71D	effundam
	<b>oriscus-clivis</b>	
oc	L78H	sanguine
ocG	L56D	Deus
ocG1	L11Q	veniet
ocGlsa5	L103T	resurgeret
oclst8	L95D	Domine
	<b>torculus</b>	
to	L78H	pro
toS	L56S	populum
toS1	L68N	Nemo
toG	L78H	tradetur
to>	L67S	mortis
to	L37M	et
tolst4	L95D	tempus
tolst8	L44I	vesperinum.
tolst9	L103P	Alleluia.
tolsth8	L56I	Dominus,
tolstnt2lst9	L92E	me
toGlsa1lst8	L109P	alleluia.
toGlsa5	L68N	condemnabo
toSlsa5	L77S	enim
to>lsa5	L118E	in
to>2lsa3	L67Q	salientis
to>2lsc1lsa3	L104I	terram
	<b>climacus</b>	
ci	L95D	eius.
unsun2	L820	da
unsun3	L103P	immolatus
unsux1	L169A	sanctum
unsun1su2	L109P	tenebris
pusu1sun1	L78H	tradetur
pusu1sun2	L95D	Sion
pusu2sun1	L95D	eius.
visu1sun1	L95D	faciem
visu1sun2	L40Q	latere
visu1sun2lsa5	L174D	et
visu1sun2lsa6	L174D	et
visu1sun1su1 Cf.	visu1sun1su1lst6	minus letter
visu1sun1su1lst6	L105N	descendit
visu1sun1su2 Cf.	visu1sun1su2lss1lst6	minus letters
visu1sun1su2lss1lst6	L168I	Alleluia.
visu2	L95D	misereberis
visun1su1sun1	L60E	conspectu
visun1su1sun1lst6	L35T	virtutem
cilslf1	L95D	Sion
cilsn8	L58A	iniquis,
pusu1sun1lsf1	L95D	mei
pusu1sun2lsa5	L67S	timebo
pusu1sun1lst7	L60E	homo
pusu3	L640	escam
pusu4	L92E	persequuntur.
unsun2su1	L640	escam
unsun1su1 Cf.	unsun1su1lst2lsc6	minus letters

unsun1su11st21sc6	L11Q	deducis
unsun21sa5	L19B	mirabile
unsun31sa3	L24T	gentes
unsun31sa6	L24T	tuam.
unsun2su2	L169A	confitebor
un1sun2su2	L136A	aeternam
un1sun1su1sun11sa11sc4	L60E	retrorsum
un1sun1su1sun11sa31sc6	L60E	retrorsum
un1sun1su2 Cf.	un1sun1su21sa5	minus letter
un1sun1su21sa5	L107H	Domini
<b>scandicus</b>		
sc Cf.	sc1st2	minus letter
sc1	L820	quia
sc1st2	L78H	quotiescumque
sc11sc4	L109P	vocavit
<b>porrectus flexus</b>		
pf	L78H	corpus
pf1	L95D	exaudi
pf2	L101V	Sorec,
pfS	L56D	festina
pfM Cf.	pfM1smd3	minus letter
pfM1smd3	L81E	meam,
pf>	L164D	ad
pf>1	L90D	miserunt
pf>2	L104I	alleluia,
pf	L95D	clamor
pf 1	L31D	ad
<b>pes subbipunctis</b>		
tosu1	L820	Domine
tosun1	L95D	fumus
tosun2	L105N	revolvit
vippn1su2	L820	miser cordiae
topp1su1 Cf.	topp1su11sa6	minus letter
topp1su11sa6	L95D	ad
pesu2 Cf.	pesu21st3	minus letter
pesu21st3	L152I	eruas
pesun3 Cf.	pesun31ss11sa3	minus letters
pesun31ss11sa3	L67S	medio
pesu2sun1	L24T	terrae
tosun11sa5	L67S	tua,
tosu11sc5	L19B	venit
toSsun11sa5	L138S	luna
tosun1su1sun1	L33S	venti.
tosun1su21sn31st6	L112D	nomine
tosun21sa6	L123A	alleluia.
<b>scandicus flexus</b>		
sf	L78H	meo
sfG	L33C	eam.
<b>torculus resupinus</b>		
tr	L78H	sumitis
trS	L95D	Domine,
tr>	L64D	diligenter
poppn1	L820	vero
po>ppn1	L820	secundum
po>pp2	L28G	angeli,
trlst31shp7	L109P	alleluia.
trlss11ss3	L103P	Christus.
trS1sc1	L103P	nostrum
<b>distropha</b>		
ds Cf.	ds1st2	minus letter
ds1st2	L95D	meam
ds1st8	L71D	effundam
ds1 Cf.	ds1pp3	minus prepunctis

<b>tristropha</b>			
ts	L820	fac	
ts1	L76E	Eripe	
ts>	L56D	adiuvandum	
ts>1	L103R	alleluia	
ts1sa2	L13A	tecum	
ts1sc21st2	L58A	Domine,	
ts>1sc2	L103R	alleluia	
ts>1sc6	L103T	dum	
<b>trigonus</b>			
tg	L67S	tua,	
tg1sn8	L67S	mala	
tg1st9	L103R	alleluia	
<b>bivirga</b>			
bv	L820	Domine	
bv1sa2	L820	nobis	
<b>trivirga</b>			
tv	L103H	bonus	
tv1sm2	L44I	Elevatio	
<b>pressus</b>			
pr	L95D	veniat	
pi Cf.	c11!pi	minus clivis	
<b>virga strata</b>			
vs	L64D	Deus	
vsG	L64D	suavis	
<b>oriscus</b>			
or Cf.	ocG	minus uncinus	
or1st3	L103P	Alleluia.	
or1 Cf.	ocG1	minus uncinus	
or> Cf.	or>1sa1	minus letter	
or>1sa1	L103R	alleluia,	
<b>salicus</b>			
sa	L820	nomini	
sa1	L78H	novi	
sa>1	L9E	sanctos	
salsc4	L93G	exsurge	
salsc6	L93G	autem,	
sa11sc4	L81E	salvasti	
sa11sc6	L113E	bonus,	
<b>pes quassus</b>			
pq	L103H	eius.	
pq1	L169A	Alleluia.	L174T
<b>quilisma</b>			
ql Cf.	ql1sst2	minus letter	
ql1sst2	L53C	Domine,	
ql> Cf.	ql>ppn1	minus uncinus	
<b>pes stratus</b>			
pt1	L13A	ventris	
pt2	L8U	confundentur,	
pt3	L94C	Domine.	
<b>subpunctis</b>			
su1 Cf.	c11!pi!	tosu1	
su1sun1 Cf.	c1!toppz1su1sun1		
su1sun1su1 Cf.	visu1sun1su11st6		
su1sun1su2 Cf.	visu1sun1su21ss11st6		
su1sun2 Cf.	pusu1sun2		
su1sux1 Cf.	popp2su1sux1		
su2 Cf.	c11!pi!pesu2		
su2sun1 Cf.	clsu2sun11st6		
su3 Cf.	pusu3		
su4 Cf.	pusu4		
sun1 Cf.	c11!pi!orsun1		
sun1su1 Cf.	unsun1su11st21sc6		
sun1su1sun1 Cf.	visun1su1sun1		
sun1su2 Cf.	qlppn1sun1su2		
sun2 Cf.	qlsun2		
sun2su1 Cf.	unsun2su1		
sun2su2 Cf.	unsun2su2		









































































































sun3 Cf.	unsun3
sun4 Cf.	bvsun4
sux1 Cf.	posux1
<b>prepunctis</b>	
pp1 Cf.	pupp1su2
pp2 Cf.	cl1!pipp2
pp2ppn1 Cf.	vipp2ppn1
pp3 Cf.	vipp3lsn3
pp4 Cf.	vipp41st2
ppn1 Cf.	po>ppn1
ppn1pp1 Cf.	vippn1pp1
ppn1pp1ppz1 Cf.	vippn1pp1ppz11st8
ppn1ppq1 Cf.	vippn1ppq1
ppn1ppz1 Cf.	ql!cl!orppn1ppz1
ppn1ppz1ppq1 Cf.	vi>1ppn1ppz1ppq1
ppn2 Cf.	vippn21st3lsa4
ppn2ppz1 Cf.	vippn2ppz1sun1lsa5
ppn2ppz1ppq1 Cf.	vippn2ppz1ppq11st2lsa8
ppn3 Cf.	unppn3sun1lsa5
ppn3ppz1 Cf.	toppn3ppz1sun1
ppn4 Cf.	vippn4
ppq1 Cf.	vippq1
ppz1 Cf.	puppz1su2
ppz1ppq1 Cf.	vi>1ppz1ppq1
<b>combined glyphs</b>	
pe!ta Cf.	pe!talsa2 minus letter
pe!talsa2	L820 iudicio
pe!talsc11st2	L114C revelavit
pe!un Cf.	pe!unlsc2 minus letter
pe!unlsc2	L95D meam
pe!pu	L95D eius.
pe!ta>2 Cf.	pe!ta>2lsa2 minus letter
pe!ta>2lsa2	L60E gentes
pe!or	L93G induebam
qlppn1sun1	L53C Domino,
qlppn1sun1su2	L820 tibi
qlppn1su1sun2	L95D frixorio
qlppn1su2 Cf.	qlppn1su21sn11 minus letters
qlppn1su21sn11	L75V mortuus.
qlppn1sun1lsc5	L54B quoniam
qlppn1su1sun1	L107H fecit
qlsu1sun1	L43L tua
qlsu2	L67S tua,
qlsux1	L53C quoniam
qlsun1su2	L44I mearum
qlsun1 Cf.	qlsun1lsa5 minus letter
qlsun1lsa5	L40Q millia
qlsun2	L122N alleluia.
qlsun2lsa5	L125U alleluia.
ql!po	L820 obedivimus
ql!poppz1 Cf.	ql!poppz1lsa3 minus letter
ql!poppz1lsa3	L95D Domine,
ql!poppn1	L43L Domine,
ql!posu1sun1 Cf.	ql!poppz1su1sun1 minus uncinus
ql!poppz1su1sun1	L43L mandata
ql!posun1 Cf.	ql!poppn1sun1 minus uncinus
ql!poppn1sun1	L61I Iustitiae
ql!poppn11st2	L103P Alleluia.
ql!posux1 Cf.	ql!poppn1sux1 minus uncinus
ql!poppn1sux1	L61I corda,

ql!polsm1	L103P immolatus
ql!polsa1lsa3lsa9	L56P nostris
ql!po> Cf.	ql!po>ppn1 minus uncinus
ql!po>ppn1	L60A ancillae
ql!cl	L43L doceas
ql!cl!to Cf.	ql!cl!to1st6 minus letter
ql!cl!to1st6	L95D me.
ql!cl!to!or Cf.	ql!cl!to!orsun1 minus uncinus
ql!cl!to!orsun1	L19B nobis.
ql!cl!toppn1	L72B vitam,
ql!cl!tosu3 Cf.	ql!cl!tosu31st6 minus letter
ql!cl!tosu31st6	L82T hostias,
ql!cl!or Cf.	ql!cl!orppn1ppz1 minus uncinus & virga
ql!cl!orppn1ppz1	L109P Populus
ql!cl!tr> Cf.	ql!cl!tr>ppz1 minus virga
ql!cl!tr>ppz1	L54B vias
ql!clppn1	L54B a
qlppn1	L820 nomini
qlppn1ppz1	L820 gloriam
qlppn1ppz11st2	L820 da
qlppn1ppz1sun1 Cf.	qlppn1ppz1sun1lsa5 minus letter
qlppn1ppz1sun1lsa5	L54B mihi
qlppn1ppz1su1sun1	L43I dominorum
qlppn2sun1 Cf.	qlppn2sun1lsa5 minus letter
qlppn2sun1lsa5	L53C Beati
qlppn2sun2 Cf.	qlppn2sun2lsa51lsa5 minus letters
qlppn2sun2lsa51lsa5	L122V sic
qlppz1su2	L40Q draconem.
qlppz1su1sun1	L53C nos
ql>ppn1	L95D confrixa
ql>ppn1lsc3	L90D speraverunt
popp2	L820 multitudinem
popp2su1sux1	L8U confundentur,
posux1	L20P eius
posux1lsa5	L114V alleluia,
posun1lsa5	L123A alleluia.
poMsun1	L81E meos
posu1sun1	L123E alleluia.
vippn1su1	L56D Deus
vippn1sux1	L53C Memento
vippn1su1sun1	L45R tuae,
vippn1su1sun11st2	L95D Domine,
vippn2sun1 Cf.	vippn2sun1lsa4 minus letter
vippn2sun1lsa4	L44I mea
vippn2 Cf.	vippn2lsa4 minus letter
vippn2lsc4	L56D quaerunt
vippn2lsa4	L44I Elevatio
vippn21st3lsa4	L103P Alleluia.
vippn3	L38I Domino,
vippn4	L60E homo
vipp2ppn1	L13A gratia
cl!pe Cf.	cl!pelsc2 minus letter
cl!pelst2	L95D sum
cl!pelsc2	L105A Domini
cl!pelsn7	L103H ea.
vipp2su2	L43L mihi
vipp2sun1lsa5	L168L eum
vipp3 Cf.	vipp3lsn3 minus letter



vipp3lsn3	L152S	Sicut	to!clM	L77C	corde
vippn1pp1	L11Q	Israel,	to!cl>1	L77C	tuum,
vippn1pp1su1sun2	L40Q	volante	to!po	L84B	Appropinquaverunt
vippn3su4	L173D	Alleluia.	to!pohd	L105A	quaeritis,
vipp4 Cf.	vipp41st2	minus letter	to!to Cf.	to!toppn1sun1	minus 2x uncinus
vipp41st2	L13A	Ave	to!tosun1 Cf.	to!toppn1sun1	minus uncinus
vippz1ppq1	L40Q	lapidem	to!toppn1sun1	L43L	discam
vippn1ppq1	L33S	venti.	to!to!pi!cl Cf.	to!to!pi!clpp2	minus prepunctis
vippn1ppz1ppq1	L101V	Israel	to!to!pi!clpp2	L60A	nostrum,
vippn1pp1ppz1 Cf.	vippn1pp1ppz11st8	minus letter	toS!to	L53C	Confitemini
vippn1pp1ppz11st8	L25M	ore	toS!tolst9	L90D	Deus,
vippn2ppz1ppq1 Cf.	vippn2ppz1ppq11st21sa8	minus letters	toS!pe	L123E	Exaudi,
vippn2ppz1ppq11st21sa8	L169A	confitebor	to!or	L67S	Domine.
vippn2ppz1sun11sa5	L173D	Alleluia.	to!orsun1lsa5	L8U	Domine.
vippn3sun11sa5	L173D	Alleluia.	to!or1st3	L114V	audiatur,
vippq1	L168S	regna.	to!orlsc6	L152S	taurorum,
cl1!or Cf.	cl1!orlss3	minus letter	to!pi!cl	L31D	est,
cl1!orlss3	L60E	iudicentur	to!pi!cl!pi!pi	L40Q	millia
cl1!orlsc3	L60E	conspectu	to!pi!cl!pi!orsun1lsa5	L40Q	speravit,
cl1!pi	L95D	avertas	oc!vi Cf.	oc!visun1	minus uncinus
cl1!pi>	L53C	misericordia	oc!visun1	L95D	Domine,
cl1!pi!to	L820	fecisti	orsu1sun1	L94C	Domine.
cl1!pi!vi	L95D	Domine,	orsu1sun1lsc2	L94C	Domine.
cl!pi!vi>	L67S	Virga	orsu1sun1lsc3	L94C	iniquis
cl1!pi!cl	L640	implebis	un!clG	L95D	exaudi
cl1!pi!pesu2	L61I	dulciora	topp2	L95D	meus
cl1!pilsn3lsa6	L174I	me	topp2sun1	L45R	tuarum,
cl1!pilsn8	L53C	iudicium,	toppn3ppz1sun1	L58A	me.
cl1!pilsn9	L640	Aperis	to>pp2	L90D	insipientiam
cl1!pilst9	L90D	Longe	pupp2su1sun1	L95D	sunt.
cl1!pipp2	L60A	Deum	pupp2su2	L93E	me.
cl1!pi!orsun1	L90D	Israel.	pupp1su2	L640	opportuno.
cl!po	L67S	es,	pupp1su1sun1	L58A	clamavi,
cl!popp3	L122V	ascendentem	puppn1su1sun2	L40Q	mille,
cl!to	L17H	eius.	puppz1su1sun2	L40Q	mille,
cl!tosu1	L17H	eius.	puppz1su2	L168S	tua
cl!tosu1lsc6	L81E	me	ds1!ds1	L43L	meos,
cl!tosu1lsc61st8	L81E	me	ds1!ts	L67S	mecum
cl!topp2	L64D	misericordia	ds1!ts1	L60E	tuo.
cl!toppz1su1sun1	L35T	Israel	cl1!orsun1	L43L	considerabo
cl!tolst9	L56I	dilexit	cl1!orsun1lsa5	L8U	fac
cl!to>	L56I	aequitatem	cl!or Cf.	cl!orpp2	minus prepunctis
cl!tosun1lsa5	L164D	meam.	cl!orpp2	L93G	induebam
cl!to!pi Cf.	cl!to!pipp2	minus prepunctis	cl1!orpp2	L103R	mirabilis
cl!to!pipp2	L33C	arcus,	ds1!clsun2 Cf.	ds1!clsun21st5	minus letter
cl!to!pi!cl	L77S	Israel	ds1!clsun21st5	L43L	doceas
cl!to!pi!clpp2	L33C	eius,	ds1!clsu1sun1 Cf.	ds1!clsu1sun11st5	minus letter
cl!to!pi!clpp2lsn9	L68Q	Sion	ds1!clsu1sun11st5	L56S	Salvum
cl!to!cl!cl	L81R	meis,	ds1pp3	L149E	tibi.
to!cl	L95D	Domine,	vi>1pp2	L67S	umbrae
to!cl!cl Cf.	to!cl!cl1st9	minus letter	vi>1ppz1ppq1	L40Q	custodiant
to!cl!clsun2 Cf.	to!cl!clsun21sa5	minus letter	vi>1ppn1ppz1ppq1	L106S	Alleluia.
to!cl!clsun21sa5	L43L	tuam	pfsun1 Cf.	pfsun1lsn5	minus letter
to!cl!cl1st9	L8A	invocavite.	pfsun1lsn5	L67S	tua,
to!cl!clsu1	L33P	meam.	pfppn1ppq1sun1lsa5	L123A	Deus
to!cl!pi	L84B	iniqui	un1ppn1ppq1sun2	L1120	estis,
to!cl!orsun1	L114V	terrae	un1sun2 Cf.	un1ppn1ppq1sun2	minus uncinus
to!clsun1	L54B	quoniam	un1ppn1sun2	L1120	Christum
to!clsun1lsa5	L11Q	Ioseph.	un1ppn1sun1su2lsa5	L152I	accelera,
to!clsu2 Cf.	to!clsu2lsn6	minus letter	clsun11st5	L44I	vesperinum.
to!clsu2lsn6	L8D	dabit	clsu31st5	L60E	tuo.
to!clsu1sun1 Cf.	to!clsu1sun11sm6	minus letter	tosu1sun1 Cf.	tosu1sun1lsn6	minus letter
to!clsu1sun11sm6	L24D	opera	tosu1sun1lsc61st7	L109P	vocavit
clsu2sun11st6	L35T	tuam.			

	tosu1sun1lsn6	L19B	venit
	tosu2 Cf. 	tosu21st6	minus letter
	tosu21st6	L37M	tu
	tgsun1lsa5	L103H	quoniam
	cl!cl!clsun1lsa5	L103P	Alleluia.
	cl!cl!cl Cf. 	cl!cl!cllsn9	minus letter
	cl!cl!cllsn9	L31D	Domine
	cl!cl!pi	L54B	commovear
	cl!cl!pi!vi	L123A	Dominus
	cl!cl!to	L149E	meam,
	cl!cl!po	L81R	insurgentibus
	cl1!pi!pi!vi	L54B	es
	cl1!pi!pisun1lsa5	L1740	plaudite
	cl1!pi!tosu1	L37S	mei
	cl1!pi!tosun1	L1740	plaudite
	sa1sun1lsa5	L11Q	tuam
	trsun2 Cf. 	trsun2lsa5	minus letter
	trsun2lsa5	L13A	Ave
	trsux1 Cf. 	trsux1lsa5	minus letter
	trsux11st8	L20P	eius,
	trsux1lsa5	L136A	aeternam
	trsu2 Cf. 	trsu21st3lsm8	minus letters
	trsu21st3lsm8	L136A	vobis
	trsun1su2 Cf. 	trsun1su2lsa3	minus letter
	trsun1su2lsa3	L149C	Domini
	bvsun4	L8U	me.
	oc!cl	L31D	Domine.
	oc!clM	L77S	peccatorum.
	oc!pe!pu	L53C	tuo.
	tg!cl	L31D	est,
	tg!cl>1	L33C	eius,
	tg!cllsn9	L68Q	Sion
	tg!or	L77C	tibi
	unppn1sun2	L40Q	Cadent
	unppn1sun2lsa5	L123E	quaesivi
	unppn1sux1	L72B	eius
	unppn1sux1lsa5	L24D	exaltavit
	unppn1sun1su2	L58A	Domine,
	unppn1ppz1sun1 Cf. 	unppn1ppz1sun1lsa5	minus letter
	unppn1ppz1sun1lsa5	L80S	habitat
	unppn3sun1lsa5	L24D	fecit
	ta>ppn1	L95D	et
	ta>pp2	L33C	ut
	pt1ppn1	L99P	tuo.
	tssun1lsa5	L24D	dextera
	cl>1pp2	L114C	alleluia,
	tasu2	L24T	tuam.

significant letters			
	lsa Cf. 	vi>lsa6	augete
	lsc Cf. 	pe!unlsc2	celeriter
	lseq	L78H	hic
	lseq~	L78H	quotiescumque
	lsequ	L56D	confundantur
	lsf Cf. 	polsf21st3	fastigium
	lsh	L44D	a
	lshn Cf. 	cl1shn8	humiliter nectum
	lshp Cf. 	trlst3lshp7	humiliter parum
	lsl Cf. 	pels12	levare
	lsn Cf. 	cl1sn9	non (tenere), negare,
	lsn1 Cf. 	cl1Glsn12	nectum, naturaliter
	lsnt Cf. 	pulsnt3	non levare
	lsm	L67S	non tenere
	lsmd	L820	mediocriter
	lss	L95D	mediocriter
	lssimp	L8U	sursum
	lssimpl	L81R	simpliciter
	lssp	L54Ae	simpliciter
	lsst Cf. 	pelsst1lsm4	sursum parum
	lst Cf. 	clsun11st5	sursum tenere
	lsth Cf. 	tolsth8	tenere
tironian notes			
	lti	L78H	pro
	ltdo	L140	iusum
	ltdr	L132E	misericordiam
	ltdx	L122V	deorsum
	ltps	L128S	descendit
	ltqm	L118E	devertit
	ltsb	L11Q	intuerentus
	ltse	L144C	prode sub eam (trade subtus)
	ltsj	L164D	sum
	ltsl	L117R	quam mox
	ltsn	L17H	et
	ltsr	L14P	sub
	ltst	L25L	seorsum
	ltus	L17H	subjice
			saltem
			sonare
			supra
			sursum
			saltate (salte)
			ut supra